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Rucker 6/21/89

ROSS BROS. CO.

VEGETABLE, GRASS
AND
FLOWER
SEEDS

EVERYBODY
KNOWS ROSS'S SEED
GROWS

1916

SCARLET
GLOBE
RADISH

GIANT PASCAL
CELERY

ROSS'S
EARLY PERFECTION BEET

ROSS BROS. CO. WORCESTER, MASS.

STEECHER CO. ROCHESTER N.Y.



New England's greatest Agricultural Department store on the right Worcester City Hall in the centre. The Bancroft, Worcester's new million dollar hotel, on the left. While this hotel cost more than a million dollars, you can get a good room from one dollar up.

Established in 1845 by John D. Lovell; in 1880 by W. H. Earle; in 1888 by Ross Brothers; 1906 by Ross Bros. Co.

We now have fourteen floors all connected, and in addition to this a large warehouse on the Boston & Main R. R. with a storage capacity of twenty-five carloads of goods. We are easily the Largest Agricultural Department Store in New England. Our seeds were planted last year from the Atlantic to the Pacific and from Cuba, to and including Canada. Progressive farmers have learned that it pays only to plant good seed even if it does cost a little more money. Our constant aim has been to carry nothing but the best seed obtainable as we know that we can succeed only by giving you the very best; and with this assurance of quality you are safe in ordering your entire supply from us.

We take this opportunity to thank all of our customers for their liberal patronage in the past and hope for a continuance of your orders in the future. Our business is growing constantly and with our large assortment of seeds, implements, fertilizing materials, poultry feeds and other farm and garden requisites we can supply your every need. Being at the junction of three large railroad systems and trolley expresses running in every direction, there is no city better situated to forward goods to every part of the globe, than Worcester.

Free Delivery. We deliver postpaid to any post office in the United States all seeds quoted by the packet, half ounce, ounce, and quarter pound at catalogue quotations for such quantities. Prices of seeds quoted in this catalogue do not include postage for quantities over one-quarter of a pound.

Seeds, plants and bulbs are now included in the Parcel Post rates, and can be sent the same as other merchandise at Parcel Post rates. See table below, but for the convenience of our customers who order seeds in small lots and want them sent by Parcel Post, we give below weights of peas, beans, sweet and field corn. With these weights for half pints, pints and quarts, it will be an easy matter to figure out the amount of postage required. Remember goods sent by Parcel Post require postage paid at our end whereas express charges go collect and paid by the purchaser. If seeds are ordered by Parcel Post and purchaser does not include postage, customer will either be notified or they will be forwarded by express.

BEANS	Weight Charged			SWEET CORN	Weight Charged		
	1/2 pt.	7 1/2 oz.	1 lb.		1/2 pt.	6 1/4 oz.	8 oz.
	1 pt.	15 oz.	2 lb.		1 pt.	12 1/2 oz.	1 lb.
1 qt.		1 lb. 14 oz.	2 lb.	1 qt.	1 lb. 9 oz.	2 lb.	
PEAS	1/2 pt.	7 oz.	8 oz.	FIELD CORN	1/2 pt.	7 oz.	8 oz.
	1 pt.	14 oz.	1 lb.		1 pt.	14 oz.	1 lb.
	1 qt.	1 lb. 12 oz.	2 lb.		1 qt.	1 lb. 12 oz.	2 lb.

LOCAL only includes Worcester 5 cts. for first lb., 1 ct. for each additional 2 lbs., or fraction thereof. 1st and 2nd zones up to and including 150 miles from Worcester, 5 cts. for first lb. and 1 ct. for each additional lb.

Weight	1lb	2lb	3lb	4lb	5lb	6lb	7lb	8lb	9lb	10lb	11lb	12lb	13lb	14lb	15lb	16lb	17lb	18lb	19lb	20lb
Zone 3 300 Miles	6c	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44
Zone 4 600 Miles	7c	11	15	19	23	27	31	35	39	43	47	51	55	59	63	67	71	75	79	83
Zone 5 1000 Miles	8c	14	20	26	32	38	44	50	56	62	68	74	80	86	92	98	1 04	1 10	1 16	1 22
Zone 6 1400 Miles	9c	17	25	33	41	49	57	65	73	81	89	97	1 05	1 13	1 21	1 29	1 37	1 45	1 53	1 61
Zone 7 1800 Miles	11c	21	31	41	51	61	71	81	91	1 01	1 11	1 21	1 31	1 41	1 51	1 61	1 71	1 81	1 91	2 01
Zone 8 Over 1800 Miles	12c	24	36	48	60	72	84	96	1 08	1 20	1 32	1 44	1 56	1 68	1 80	1 92	2 04	2 16	2 28	2 40

Do not get our firm confused with any other seed house with similar name. There is a seed house with similar name in Kansas, also one in Kentucky. Remember our address is Worcester, Mass.

Recorded

ROSS BROS. CO., 90-92 Front Street, Worcester, Mass.

No.

Date of Order

Date Shipped

Date Billed

Page No.

Rec'd by Shipper

State here whether you wish shipment forwarded by mail, express or freight

Rec'd by S. R.

Sold to _____

Town and State

County _____

Checked and Filed

Ship _____

To _____

	Check	Pounds	Bush.	Bags	Doz.	Price	Net
Filled by							
Checked by							
Bags							
Bags							
Bags							
Boxes							
Bales							
B'dl's							
Crates							
Pkgs							

Please be sure to include Parcel Post charges
otherwise goods will be sent by express.

AN EASY WAY TO OBTAIN YOUR SEEDS

Ross Bros. Company have secured the close co-operation of the Order and Commission Department of the American Express and National Express Companies, in order that their patrons may be free from any trouble in placing their seed orders and from any delay in receiving them.

Responsible purchasers, if the amount of their order does not exceed \$5.00 can go to the Agents of the express companies in their towns and give them the order. They, in turn, will send it to Ross Bros. Company, advancing the amount (for a small fee) and collecting it from the purchaser upon delivery. Or, if the order is above \$5.00, and the purchaser is acquainted with the express agent, Ross Bros. Company will ship the order C. O. D., upon the agent's guarantee that the C. O. D. and express charges will be paid. Or, if the purchase is to be made direct by mail order, American Express or National Express Money Orders are recommended as a convenient and safe method for making the transmission of the money.

Do not send money loosely through the mail! Express money orders entail no red tape, either in securing them or in their negotiation by Ross Bros. Company. Money Order rates issued in the United States are as follows:

Not over \$2.50	3c	Not over \$40.00	15c
Not over 5.00	5c	Not over 50.00	18c
Not over 10.00	8c	Not over 60.00	20c
Not over 20.00	10c	Not over 75.00	25c
Not over 30.00	12c	Not over 100.00	30c

(Express rates and postal rates are the same)

The quick service of the American Express Order & Commission Department affords a reliable medium for making purchases of seeds and other commodities. Orders sent through this department are promptly delivered and forwarded by the first possible express. The Company makes no charge for this special service, beyond the usual rates for carrying the goods and a minimum fee when it advances the purchase money. The express agent acts as a personal representative to you at your end of the line and to us in Worcester, thus eliminating the danger of loss or misdirected or misunderstood orders.

Seed buying is an important function and to produce the best results for the season's profits should be wisely and promptly attended to. Delay is often disastrous. We believe that you will receive the heartiest assistance if you drop in at an early date and get the aid of either the American or National Express Agent in your town.

Owing to the unsettled conditions
of the market, due to the war, all
prices quoted in this catalogue are
subject to change without notice.

Sudan Grass

A New Hay Crop That Makes Phenomenal Yields
On All Kinds of Soil and Under Wide Variety
of Climatic Conditions

WHAT SUDAN GRASS IS

It is the most prolific and dependable hay crop in the area of limited rainfall in the North and West. Introduced into the United States by Professor C. V. Piper of the Department of Agriculture, in 1909, it has surpassed the fondest expectations and undoubtedly will replace the millets over a large area where the latter are hay producers at the present time. Part of the original importation of seed was given to the care of Director A. B. Conner of the Texas Experiment Sub-station at Chillicothe, this he planted during April, and by mid-summer it had attained a height of nearly seven feet, when the seed was harvested and saved. By obtaining more seed from the government and making successive experiments the crop has been standardized. At the beginning of the 1915 season, the crop of seed in Texas alone was about 1,500,000 pounds, but this represents about seventy-five per cent of all the Sudan Grass grown in the United States.

While the most extensive trials of this grass have been made in the Southwest, the last season has proven, without a doubt, that it will adapt itself to even our northern latitude.

PLANTING

Plant in rows 30 to 36 inches apart, dropping the seed by hand or using a small plate in the seed drill. The seed should be planted 1½ to 2 inches in depth and be planted in moist soil so it will germinate quickly. Use 2 to 3 pounds of seed per acre. A thick stand is not needed, as 100 or more stalks will frequently grow from a single seed. Sudan Grass may also be sown broadcast using 15 to 25 pounds per acre. This method has been prohibitive until now on account of the cost of seed, but at present prices this may be done quite reasonably.

Strictly speaking, Sudan Grass is no grass at all, but is a mild form of sorghum, originally found near Khartum, Sudan.

CULTIVATION

If planted in drills, cultivate often and shallow. The roots grow near the surface, and deep cultivation after the plants get well started will cut off a large proportion of the roots and reduce the yield. The cultivation may be done with the ordinary two-horse corn cultivator. Keep the soil well worked until the plants cover the ground so that the weeds will not grow.

HARVESTING

Sudan Grass should be cut for hay as soon as the plants are fully headed. Under fair weather conditions it can be treated just like heavy timothy hay or millets, being cut in the morning if may be raked into large windrows in the afternoon and hauled in or stacked the next day. Seed sown about the middle of May will be ready to harvest about the middle of July, and this gives ample time for a second growth. Reports vary a good deal of this grass. There were 12,000 to 15,000 acres of Sudan Grass grown in the Southwest in 1914 and yields have been reported as high as 5½ tons per acre.

FOR HAY OR PASTURE

Milch cows pastured on Sudan Grass showed an increase of 3.2 pounds per day over stock hay; receiving the same light grain ration. From June 24th to July 8th, the crop was pastured at the rate of fifteen cows a day on three acres, and after a rest of two weeks, the grass was again pastured for sixteen days. Hay from Sudan Grass is eaten with relish by horses and cattle. In quality it ranks with the best grades of millet.

The stooling habit of Sudan Grass after being cut caused many of the single plants to produce from 350 to 500 stems. This will convey an idea of the vigor of this hay. Comparisons with millet have been made, and it is found that millet can be counted on to yield about one and one-half tons an acre, or slightly more. Sudan Grass, therefore, yielded more than twice as much hay. Hundreds of farmers have become convinced in one trial that Sudan Grass is the most prolific hay crop for making a palatable hay eaten readily by cows, horses and pigs.

Sudan Grass is strictly an annual and dies each year like millet, and must be seeded again each spring. This makes it fit admirably into any system of rotation, and while it does not benefit the soil like legumes, it does afford a change in crop, and this is a good thing for the soil.

State agricultural experiment stations throughout the West during 1914 raised Sudan Grass under close observation. As far north as Montana the new crop has been tested. The results have been highly satisfactory. Some of the results obtained at these different areas follow:

MONTANA

Experiment Station, Bozeman—Sudan Grass was planted May 15th at the rate of twenty-five pounds per acre. The field was irrigated July 25th and August 21st. The yield of cured hay was 4.35 tons an acre. Another field was sown in rows thirty-six inches apart at the rate of eight pounds of seed an acre. It also was irrigated July 25th and August 21st, and the yield was 3.6 tons an acre. It grew more than six feet high and made hay of good quality. The station is at an altitude of more than 4,800 feet and the nights are cool. Irrigation would add greatly to the yield, but without it the Sudan Grass made vigorous growth and is destined to be one of the leading dry land forage crops for this section. We regard it as the most promising forage or hay crop ever introduced into this state. The better the seedbed, the better the crop.—Alfred Atkinson, Professor of Agronomy.

COLORADO

Agricultural Experiment Station, Rockford—Sudan Grass has been grown at station for the last two years. As a forage crop it yielded 180 pounds of green forage per rod with irrigation, and under dry land methods it made two and one-half tons of hay an acre in an indifferent season. Some of the plants stood seven to nine feet high. Sudan Grass was fed as green forage every morning to milch cows with excellent results. They increased their flow of milk readily. Early planting is not recommended in Colorado, about the same precautions being urged for it as for cane. As an annual forage or hay crop, no other crop in Colorado can hope to surpass it.—Philo K. Blinn, Alfalfa Specialist.

ARKANSAS

Agricultural Experiment Station, Fayetteville—Two hay crops were cut this year, averaging almost two tons an acre at each cutting. In the central and southern part of the state four cuttings netted almost six tons of hay an acre.

Price, lb. 20 cts., 10 lbs. or over, 18 cts. lb.

ROSS BROS. CO., 90-92 Front Street, Worcester, Mass.

SUDAN GRASS



The above photograph, taken during the summer of 1915, is a trial of Sudan Grass made by Mr. W. D. Ross on his farm at Worcester, Mass.

ROSS BROS. CO.
SEEDS OF ALL KINDS
WORCESTER, MASS.

GENTLEMEN:

I am including \$1.00 with my remittance to cover a year's subscription for THE COUNTRY GENTLEMAN (52 issues).

Name_____

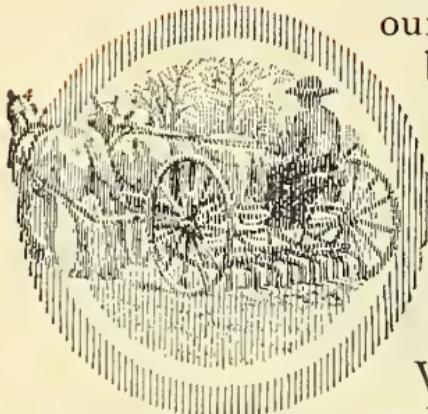
Street Address
or R. F. D._____

Post Office_____

State_____

THE COUNTRY GENTLEMAN,
The National Farm Weekly, is published by
THE CURTIS PUBLISHING COMPANY,
Independence Square, Philadelphia.

WE BELIEVE



our seeds and plants are the best that grow, but even the best will not bring forth big crops without proper methods of soil preparation and fertilization and planting and cultivation.

We want you to get the best results possible. And we believe we have found the medium that will help you to get the most out of our seeds and plants in your fields and orchards and gardens.

If you will fill out the coupon on the reverse of this slip and send it to us, adding \$1.00 to your seed-order remittance, we shall be glad to have your name listed as a subscriber for one year—fifty-two issues—for

*The COUNTRY
GENTLEMAN*

From _____

Post Office _____

State _____

ROSS BROS. CO.,

WORCESTER,

90-92 Front St.

MASS.





The Worcester Lawn Grass Seed PRODUCES QUICKLY AFTER SOWING

a luxuriant velvety growth of rich verdure. Eventually a firm, durable sward which, with proper care, will last indefinitely

It is beyond question that a thicker and more prolonged growth is very generally produced by a combination of several grasses than by only one or two. The Worcester Lawn Grass Seed is a mixture of all the species which are, because of their fine, even growth, adapted for the lawn. Most of these grasses have also some feature or features peculiar to the species which make it a component, like especially early growth, rapid development, hardiness, remarkable tenacity, remaining green late in the fall, permanency, etc. Combined in well-balanced proportions, the result of years of study and observations, the Worcester Lawn Grass Seed will produce in a few weeks a fine, velvety growth, and each succeeding season a continuous thick growth from early in the spring until the ground freezes, forming a close, firm turf which will bear frequent cutting and constant trampling without injury. And with reasonable care this desirable condition of the lawn may be maintained permanently.

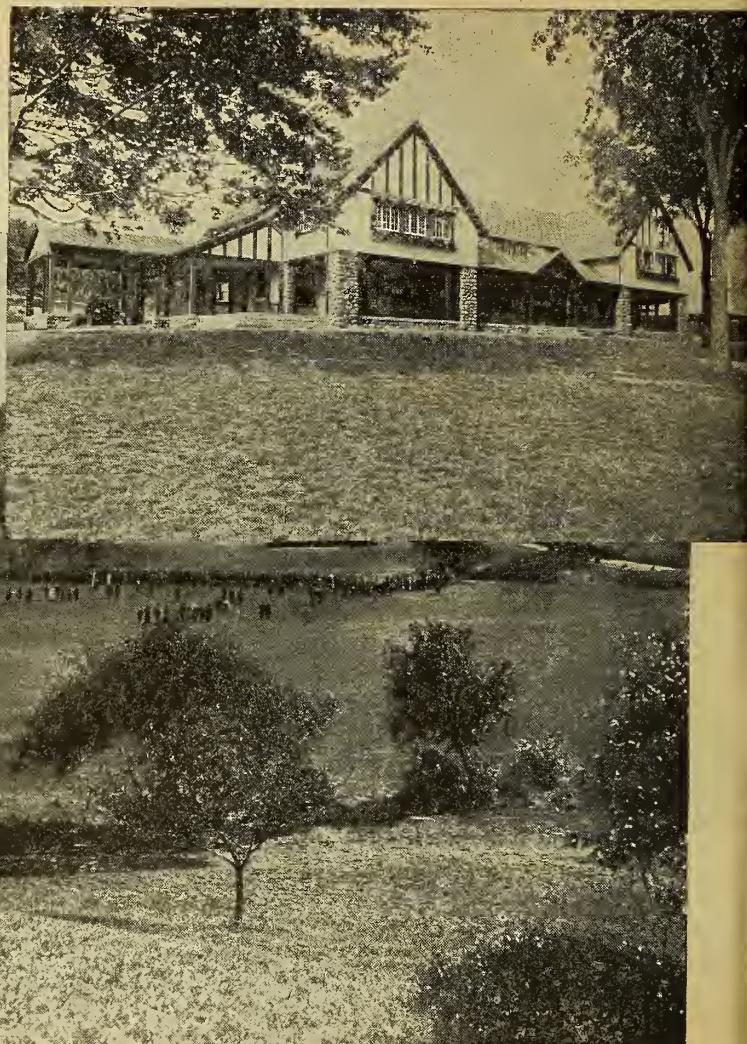
Worcester Lawn Grass is a mixture of the highest grade seeds of foreign and native grasses. The mixture is heavier than those generally offered, weighing about twenty-five pounds to the bushel, and is as free from weed seeds as it is possible to make it with the most improved machinery. In all desirable features we claim for the Worcester Lawn Grass Seed, at least, an equality with the best that is offered by others; that it is superior to much that is offered we are certain.

We advise a minimum sowing of 65 pounds to the acre, but often a larger quantity would probably be preferable; 80 or 90 pounds would not be too much when the quickest possible effect is desired. A pound will sow about 500 square feet.

Lb. 30 cts., 5 lbs. \$1.40, 10 lbs. \$2.50, 25 lbs. or more 24 cts. per lb., including bags.

**Opening of Worcester Country Club
Grounds**

**Ex-Pres. W. H. Taft playing first
stroke on new Golf Course**



The Shady Spot Lawn Grass Seed

Bare spots in shady places under trees seriously affect the general appearance of what would otherwise be a perfect lawn. Many of the grasses which are used in our regular Worcester Mixture are not adapted for such places. We have therefore designed a preparation especially for these conditions, which is made of grasses that will thrive with but very little, and some varieties, practically, no sun. This mixture includes varieties most of which are of a dwarf habit and of fine and even growth. To secure a good growth of seed in such places it is usually necessary to Lime the soil; the ground should also be properly prepared before using the seed. Soil that is not moist and which has been densely shady is very liable to be sour, which is indicated by the growth of moss and sometimes of bog grass. In such cases the grass should be removed, the soil thoroughly worked over and an application of Lime be given at the rate of one bushel for each thousand square feet. This should be thoroughly mixed with the soil before the seed is sown.

The proper thinning of shade trees is as important as the thinning of fruit trees. Many times by cutting a limb here and there, allowing a little sunlight to break through, you will get a much better result than you will where the tree is allowed to grow as it pleases. Begin to thin or trim your shade trees the first year they are planted. Of course if you have large trees that have been neglected this cannot be done but many large trees can be made more shapely and will thrive better if properly thinned, allowing the sun to break through and reach the dark places. One of the principal causes of failure under large trees is the constant dripping of water, where the water runs down the limb and constantly drips from one point, digging holes in the lawn and washing out the grass roots.

Lb. 35 cts., 5 lbs. \$1.65, 10 lbs. or over 30 cts. per lb.

Golf Course Mixtures for Putting Greens and Fair Greens

We import in large quantities what are known as fancy grasses which are used largely for fine lawns and golf links, also for parks and cemeteries. This mixture is composed of mostly foreign grasses which have proven their value in this country, together with some of our finest native sorts. The base of our Putting Green Mixture is Rhode Island Bent (*Agrostis canina*), which is beyond question the finest variety for this purpose. We also make a Fair Green Mixture, not as expensive as the above, but a mixture adapted for fair greens which we can sell at a much lower price. The price of our Putting Green Mixture per peck, \$2.00; bushel, 24 lbs. \$7.00; Fair Green Mixture \$1.25 per peck; bushel, 20 lbs. \$4.50.

THE PARK LAWN GRASS SEED

This mixture is prepared to meet the demand for a cheaper grass than our Worcester Mixture. It is somewhat lower in price because we have left out many of the higher priced imported grasses, but this will be found entirely satisfactory for back yards and out of the way places where a rich green velvety lawn is not an absolute necessity. It comprises nearly all the varieties which are found in the Worcester Mixture but in different proportions. The park mixture is a good mixture and is certain to give satisfaction. The seed is sold by the bushel of 20 lbs. and one quart is sufficient for 300 square feet. One quart 20 cts., 4 qts. 65 cts., pk. \$1.10, bus. 20 lbs. \$4.00, bags included.

We Can Furnish You Anything to Make the Grass Green on Your Lawn

If You Want a Rich, Green, Velvety Lawn You Must Feed It.



Our Worcester Special Odorless Lawn Dressing is of Special Interest to Owners or Those in Charge of Private Estates, Golf Links, Parks, Etc.

A rich, velvety lawn of deep, elastic turf—not merely a piece of ground covered with grass but a lawn of luxuriant richness with closely interwoven, firm, and enduring turf should be an essential feature of the home grounds. Of course it goes without saying that proper drainage and thorough preparation of the soil is necessary, but assuming that this has been done, the beauty of your lawn depends almost entirely on two things, seed and fertilizer.

It is essential to use a lawn seed composed of a well-balanced combination of fine leaved, deep rooting grasses that will interweave and thrive under varying conditions of soil and climate.

Intelligent fertilizing is equally important and it is unreasonable to suppose that a lawn will stand a constant cutting, trampling and other abuses without some compensation in the way of plant food.

If the luxuriance of your lawn is to be maintained it will be necessary to top dress it at least once a year with a complete fertilizer.

The old practice of top dressing lawns with a stable manure, so objectionable on account of unsightliness and disagreeable odors has been done away with.

WORCESTER SPECIAL LAWN DRESSING

The last word in grass foods, is the recognized standard in New England and is used on many of the largest Estates, Golf Links, Parks and Cemeteries throughout the country. In mixing we use principally Fine Ground Bone, Muriate of Potash, Nitrate of Soda, Kiln Dried Sheep Manure and Tobacco Dust. The latter in combination with other ingredients in the mixture forms at once a highly effective insecticide as well as an unexcelled fertilizer, ridding the lawn of white grubs and other injurious insects and imparting to the grass that beautiful dark green color so much desired by everyone.

Nitrogen, 3.25; equal to ammonia, 3. 50; sol. ava. phosphoric acid, 8.00; potash actual, 1 %.

Put up in 25 lb., 50 lb. and 100 lb. bags. 25 lbs. 85 cts., 50 lbs. \$1.50 and 100 lbs. \$2.65.

Special prices for 5, 10 and 20 ton lots.

We handle other fertilizing materials which are often used in the garden, greenhouse, or conservatory. While we buy these materials in carload lots we can supply them in small quantities to suit the requirements of our customers.

PURE FINE GROUND BONE. 5 lbs. 25 cts., 25 lbs. \$1.00.

HARDWOOD ASHES. 25 lbs. 40 cts., 100 lbs. \$1.25.

TOBACCO DUST. 5 lbs. 25 cts., 25 lbs. \$1.00, 100 lbs. \$2.50.

NITRATE OF SODA. 5 lbs. 50 cts., 25 lbs. \$1.25.

NOVA SCOTIA PLASTER. 10 lbs. 25 cts., 50 lbs. 75 cts.

GARDEN FERTILIZER. 25 lbs. 75 cts., 50 lbs. \$1.25, 100 lbs. \$2.25.

We do not sell less than the above amounts.

PULVERIZED SHEEP MANURE

This is a pure, natural manure, and the most nutritious food for plants. Its effect is immediate, much more lasting and healthy than guano or any other manure. It is the best of all manures for mixing with the soil for greenhouse plants. It makes the richest, safest, and quickest liquid manure, rivaling guano, without any deleterious effects. Instead of being put up in the natural state, as formerly, we have it kiln-dried and then finely pulverized.

5 lbs. 25 cts., 25 lbs. \$1.00, 50 lbs. \$1.50, 100 lbs. \$2.00, ton \$32.00. Special prices by the car-load.

DIRECTIONS. For mixing with soil: one part manure to six of soil. For making a liquid: one pound to five gallons of water. This can be used with safety every day.

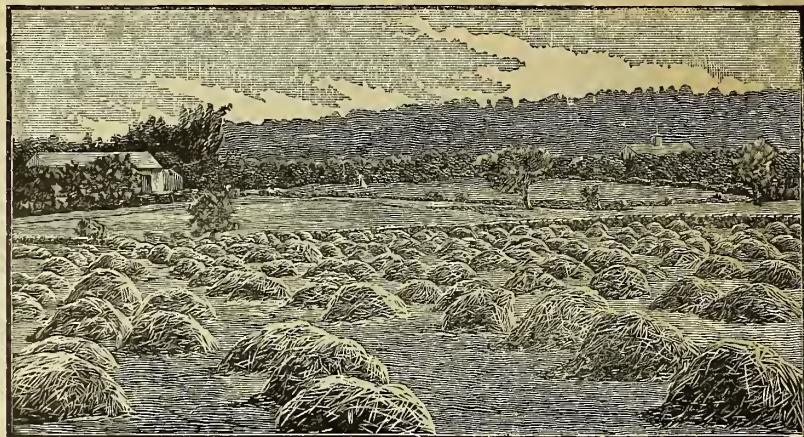
Price List of Mapes Fertilizer for Season of 1916

	Per Ton	Per 100 lbs.
POTATO MANURE, War Brand, 4½-8-1	\$43.00	\$2.30
GENERAL SPECIAL, War Brand, 7-8-1	50.00	2.65 ^{dt}
TOP DRESSING, Full Strength, War Brand, 12-8-1	65.00	3.75
CORN MANURE, War Brand, 3-10-1	40.00	2.15

Ready-Made Fertilizer

Our own Special Mixture for All Crops

Farmers who do not thoroughly understand the compounding of chemicals will get much better results and save money by buying our special mixtures for different crops, which are mixed especially for us with latest improved machinery and by skilled men who understand the business thoroughly. Mixing chemicals, or raw materials as they are commonly called, is very dangerous unless the person doing the work has had experience or is a graduate of some agricultural college, and even then, we doubt if it is profitable to undertake to compete with large firms who have all the up-to-date machinery for doing this work; but one thing is sure, and that is, we must use more high-grade fertilizers if we want to get the best results. Our fertilizers have given excellent satisfaction in the past and we are in position to quote as low prices, considering the quality of the goods, as any manufacturer.



Ross Bros. Co.'s High Grade Potato and Vegetable Fertilizer

This is a strictly high grade potato and vegetable fertilizer, to be used without the aid of stable manure, for potatoes, vegetables and roots of all kinds. It pays to use a liberal amount of fertilizer on any crop, especially potatoes. They should be planted on new land or land that has only been cultivated one year from sod.

GUARANTEED ANALYSIS—Per Cent		Per Cent	
Nitrogen.....	2.88	Avail. Phos. Acid.....	8.00
Equiv. in Ammonia.....	3.50	Insol. Phos. Acid.....	.50
Sol. Phos. Acid.....	6.00	Total Phos. Acid.....	10.50
Rev. Phos. Acid.....	2.00	Potash (K2O).....	1.00

For all root-crops, such as potatoes, turnips, beets and others requiring potash. 100 lbs. \$2.25, per ton \$42. \$1 per ton discount for cash.

Ross Bros. Co.'s Corn, Grass and Grain Fertilizer

A high grade fertilizer especially recommended for corn, or seeding down to grass and grain. Apply one-third to one-half broadcast which should be thoroughly harrowed in, the balance in the hill at the time of planting. Corn and grass will stand much higher fertilizing than grain.

GUARANTEED ANALYSIS—Per Cent		Per Cent	
Nitrogen.....	2.88	Avail. Phos. Acid.....	8.00
Equiv. in Ammonia.....	3.50	Insol. Phos. Acid.....	.50
Sol. Phos. Acid.....	6.00	Total Phos. Acid.....	10.50
Rev. Phos. Acid.....	2.00	Potash (K2O).....	1.00

In 100 lb. bags only. 100 lbs. \$2.25, ton \$42; \$1 per ton discount for cash.

Ross Bros. Co.'s Potato and Vegetable Fertilizer

A good cheap fertilizer, but intended to be used in connection with stable manure for all kinds of vegetables or for the kitchen garden, but if the land is not in good condition or stable manure cannot be had, use the high grade.

GUARANTEED ANALYSIS—Per Cent		Per Cent	
Nitrogen.....	1.65	Avail. Phos. Acid.....	8.00
Equiv. in Ammonia.....	2.00	Insol. Phos. Acid.....	.50
Sol. Phos. Acid.....	6.00	Total Phos. Acid.....	8.50
Rev. Phos. Acid.....	2.00	Potash (K2O).....	1.00

25-lb. bags 70 cts., 50-lb. bags \$1.25, 100-lb. bags \$2.20, ton lots \$39 per ton; \$1.00 per ton discount for cash.

Ross Bros. Co.'s Spring Grass Top Dressing

This is a high grade top dressing designed especially for grass, being very high in Ammonia which is necessary for a good hay crop. Apply early, 300 to 500 pounds per acre.

Guaranteed analysis: Ammonia, 7%, Phosphoric Acid, 6%, Potash 1%. 100 lbs. \$3.00, ton \$51.00.

AGRICULTURAL LIME. The agricultural colleges have been experimenting for some time to ascertain the influence lime has upon the soil when used with different crops, and the results show beyond all doubt that a large majority of our common vegetables need lime. This is especially true in regard to asparagus, beets, spinach, squash, lettuce, and onions. Lime should be applied at the rate of one ton per acre. Ton \$5. Special price in car lots for direct shipments.

NITRATE OF SODA. 95% purity; 19% ammonia. In original bags of about 275 pounds each. \$4.80 per 100 lbs.; per ton \$80.

PLAIN SUPERPHOSPHATE. 14 to 17 per cent soluble and available phosphoric acid. In 200-lb. bags. 100 lbs. \$1.50, ton \$22. Special prices for carload lots.

DRIED BLOOD. 12 per cent ammonia. In 200-lb. bags. 100 lbs. \$3, ton \$55.

FINE GROUND TANKAGE. 9 per cent ammonia, 20 per cent bone phosphate. In 200-lb. bags. 100 lbs. \$2.10, ton \$40.

FINE GROUND NOVA SCOTIA PLASTER. White and fine. In 200-lb. bags. 200 lbs. \$1.10, ton \$10.

ONONDAGA, NEW YORK GRAY PLASTER. 200-lb. bag, 90 cts., ton \$9.00.

FINE GROUND BONE. 3 to 4 per cent ammonia, 22.80 to 25.23 per cent phosphoric acid. In 200-lb. bags. 100 lbs. \$2.00, ton \$38.

TOBACCO DUST. Fine, ground; for greenhouse use this is one of the best articles for dusting all kinds of plants that are affected with insects of any kind. 5 lbs. 25 cts., 50 lbs. \$1.15, 100 lbs. \$2.

DRY GROUND FISH. 9 to 10 per cent ammonia, 25 to 30 per cent bone phosphate. 100 lbs. \$2.75, ton \$48.

CANADA HARDWOOD ASHES. We handle these in large quantities and can quote carload prices delivered at any freight station in New England. F. o. b. Worcester, \$20, 100 lbs. \$1.25.

As wood ashes contain about 4% of potash they are a good substitute for many commercial fertilizers during the present war conditions.

We will mix any of the above for \$2 per ton extra. This price applies to goods shipped from Worcester, only.



The Worcester Mixtures of Grass Seeds

For Meadows and Pastures

PRODUCTIVE—PERMANENT—PROFITABLE

On strong retentive soils and for a short duration there are perhaps no grasses superior to timothy or to that and redtop combined and perhaps no others which will at first on strong soils give a larger yield; but for a continual large production, especially on lighter soils, a combination of several other varieties is undoubtedly superior.

While in recent years some of the other grasses have come into use, their value for various purposes, especially when combined in mixtures, is yet but little known and their use very limited when compared with their use in foreign countries.

That a thicker growth is obtained by a mixture of several grasses than by the use of only one or two is a well-settled fact. That in consequence a larger yield may be expected appears to us entirely reasonable, providing, of course, that the mixture contains the grasses adapted for the soil on which it is to be sown. Grasses vary greatly in their adaptability for the different kinds of soils, habit of growth, time of maturing, productiveness and permanency. While timothy is, as already stated, very productive on rather moist or retentive soil, it does not thrive on light soils nor is it very permanent on any. Redtop, though a permanent grass, does not succeed as well on light soil as some other grasses nor is it sufficiently productive to be grown alone. Orchard grass is a very productive and permanent species and thrives on a variety of soils but aside from its value for growing alone in orchards is not, owing to its rather coarse growth and stooling tendency, as satisfactory when grown alone as when combined with some of the grasses of finer growth. Other grasses also have various characteristics which make them more suitable for mixtures than for sowing alone. Some are of tall and rather coarse growth, others are shorter and of fine growth, very nutritious but hardly productive enough to warrant their use alone. Combined, however, with the taller, coarser-growing grasses they make an excellent bottom growth and help greatly to cover the ground by filling the interstices between the tall grasses, restraining somewhat their rather coarse growth and add considerably to the total yield. Combined in right proportions, a mixture of the different species will produce, eventually, not only a larger crop at first cutting than timothy but a much heavier crop of rowen, and will, if the land is well enriched, continue to do this for many years.

Superior as a mixture is for permanent mowing it is even more valuable for the permanent pasture. While there are some farmers who so rotate their crops that the permanency of the mowing lands is not of great consideration, all who regularly pasture their stock invariably desire that the pasture shall be permanently productive when once seeded. Timothy, having a bulbous root instead of fibrous roots like other grasses, will not bear the close cropping of cattle; therefore, is short-lived and the least desirable of all grasses for the permanent pasture. Not only is it desired that the pasture shall be permanent but it is necessary, to be of the greatest value, that the pasture shall furnish continual feed from early in the spring until fall and this condition can be secured by a mixture of many varieties. In fact, the mixture for the pasture should contain all the varieties which are of any value and adapted for the soil or location including especially those which will bear close cropping.

The following mixtures are the result of much study of the opinions of many recognized authorities, opinions based on years of observation and practical experience. They are offered with the greatest confidence that each, for the purpose indicated, will in most cases prove superior to the common method of seeding. Considering the present extremely high prices of certain grass seeds, used in these mixtures they are offered at a very reasonable price. Even if the initial cost is a trifle more it is more than offset by the ultimate results—greater production and permanency of the mixtures.

The quantities advised are minimum amounts and unless clover seed is sown these quantities might probably be profitably increased. We advise, however, that in addition to these quantities 4 to 8 pounds of clover seed be sown to the acre, according to the nature of the soil and mixture; on soil known to be especially adapted for clover, the maximum quantity might, perhaps be profitably increased. The quantity most advisable can be determined better by the individual farmer than by us. For general advice, we would suggest that for soils of medium texture and moisture, two pounds of medium Red or Mammoth to one of Alsike would be a good proportion. For moist soils, just the reverse—two of Alsike to one of Medium or Mammoth. White Clover would be better used to some extent with all pasture mixtures and Alsike with those for medium and moist soils. The great value of clover as a soil-enricher as well as its value for feeding, makes it well worth while to try it to some extent on light soils. We cannot include clover seeds in mixtures, because on account of their greater weight, they should be sown alone, and also, because, in this latitude, they should not be sown much later than August.

WORCESTER MIXTURE FOR PERMANENT MOWING

For medium Soil, 40 lbs. to the acre.

Less than 40 lbs., 18 cts. per lb., 40 lbs. or over, 17 cts. per lb.

WORCESTER MIXTURE FOR PERMANENT MOWING

For Dry Soil, 45 lbs. to the acre.

Less than 40 lbs., 18 cts. per lb., 40 lbs. or over, 17 cts. per lb.

WORCESTER MIXTURE FOR PERMANENT PASTURE

For Medium Soil, 40 to 45 lbs. to the acre.

Less than 40 lbs. 18 cts., per lb., 40 lbs. or over, 17 cts. per lb.

WORCESTER MIXTURE FOR PERMANENT PASTURE

For Dry Hilly Land, 45 or 50 lbs. to the acre.

Less than 40 lbs., 18 cts. per lb., 40 lbs. or over, 17 cts. per lb.

Note. Too great emphasis cannot be given to the advisability of cutting the hay crop early. On account of the general earlier maturity of the grasses in the mowing mixtures the crop should be cut from ten to twelve days earlier than timothy. We believe it may be safely stated that it is better to cut all grass crops too early than too late. While there may be some loss in nutritive quality, the loss will, in our opinion, be more than offset by the readiness with which stock will eat the more tender product, and also by the much larger crop of rowen almost certain to follow the earlier cutting.

Grass Seeds of the Highest Grade

With the exception of when more than one grade of a species is offered the seeds of all grasses are of the grade known in the trade as "fancy." This is the highest grade obtainable and is as nearly pure as the greatest care and most improved machinery can make it. This should be considered when comparing our prices with those of other dealers. All the seeds offered have been tested by expert analysts either in this country or abroad and the purity and growth will be given, if desired, on application. We invite further analysis and microscopic examination and will send samples on application.

Prices of all Grass Seeds subject to market changes. Prices include bags or sacks. Unless otherwise noted, 25 lbs. at 100-lb. rate.

TIMOTHY (*Phleum pratense*). More largely used than any other grass but often when other varieties would be more profitable 45 lbs. to the bus.

WORCESTER GRADE. Heavy, recleaned seed, guaranteed 99.5 per cent pure. Lb. 18 cts., 10 lbs. \$1.50, bus. \$5.00, bags included.



TIMOTHY

KENTUCKY BLUE GRASS (*Poa pratensis*). One of the most valuable grasses for pasture and lawn, requires some time to become established but lasts indefinitely on congenial soils. Much of the seed of this grass that is offered does not weigh over 14 lbs. to the measured bushel—the old standard weight—and even some offered as "fancy" does not weigh but 16 lbs.

FANCY EXTRA RECLEANED. 21 lbs. to the bushel. Lb. 22 cts., 10 lbs. \$2.00, 100 lbs. \$18.00.

MEADOW FESCUE (*Festuca pratensis*). Largely used for permanent mowing mixtures. Though at once productive, it does not reach its full production for two or three years, when it surpasses most other grasses. Succeeds best on cool, moist soil, rich in organic matter. Lb. 20 cts., 10 lbs. \$1.80, 100 lbs. \$17.00.

MEADOW FOXTAIL (*Alopecurus pratensis*). One of the best pasture grasses; makes an earlier growth than any other variety, thrives best in low, moist land, but grows well on high, light soil and bears extreme summer heat without burning. Lb. 40 cts., 10 lbs. \$3.80, 100 lbs. \$37.50.

ORCHARD GRASS (*Dactylis glomerata*). One of the most nutritious and valuable grasses, early, hardy, and permanent, and thrives in all soils and situations. Bears frequent mowing and constant cropping, and is very productive. Should be included in liberal proportions in most mixtures for both mowing and pastures. Lb. 25 cts., 10 lbs. \$2.20, 100 lbs. \$21.00.

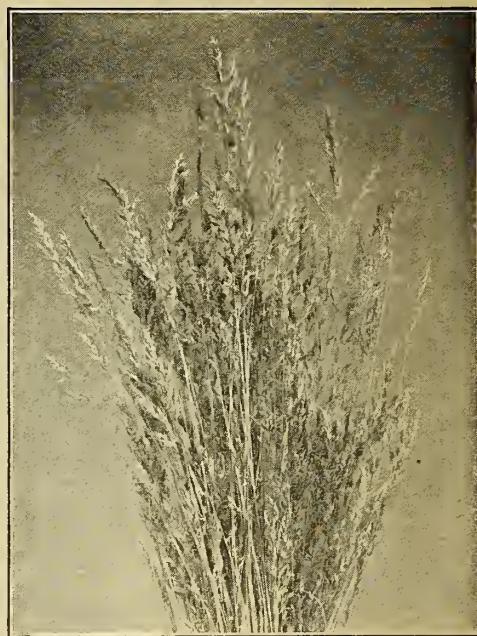
RED, or CREEPING FESCUE (*Festuca rubra*). A creeping-rooted grass thriving in dry, poor soils. Forms a close, firm turf and is valuable for shaded lawns. Also valuable for gravelly banks and exposed hillsides. Lb. 30 cts., 10 lbs. \$2.80, 100 lbs. \$25.00.

RHODE ISLAND BENT (*Agrostis canina*). Of fine growth, forming a close and permanent sod. One of the best lawn grasses and desirable for pasture mixtures. Lb. 38 cts., 10 lbs. \$3.50, 100 lbs. \$34.00.

ROUGH-STALKED MEADOW GRASS (*Poa trivialis*). Thrives on moist, rich land. Valuable for both meadows and pastures, but should be used only in mixtures. Especially desirable for shaded lawns. Lb. 38 cts., 10 lbs. \$3.60, 100 lbs. \$35.00.

SHEEP'S FESCUE (*Festuca ovina*). Of dwarf but thick growth; thrives on dry uplands and in poor, sandy or gravelly soils where other grasses would fail. Valuable for pasture mixtures. Lb. 25 cts., 10 lbs. \$2.25, 100 lbs. \$20.00.

SWEET VERNAL (*Anthoxanthum odoratum*). Used in small quantity in both meadow and pasture mixtures on account of its pleasing fragrance, and is especially desirable for the pasture because of its both early and late growth. True perennial. Lb. 60 cts., 10 lbs. \$5.50.



RED TOP

WACHUSSETT GRADE. 97.5 per cent pure. Lb. 15 cts., 10 lbs. \$1.20; bus. \$4.50, bags included.

WORCESTER GRADE RED-TOP (*Agrostis vulgaris*). Next to Timothy the most largely used grass; succeeds best on moist soil, but thrives well on a variety of soils, and is valuable for permanent mowing, pastures, and lawns. Recleaned, or Fancy. Lb. 25 cts., 10 lbs. \$2.30; 100 lbs. \$22.00.

AWNLESS BROME GRASS (*Bromus inermis*). A hardy and productive grass, thriving on very dry and poor soil, where most other grasses would not grow. Lb. 20 cts., 10 lbs. \$1.75, 100 lbs. \$16.00.

CANADA BLUE GRASS, (*Poa compressa*). Thrives on poor, dry soil, and also on hardy, clayey ground; withstands extremes of drought or wetness; bears trampling well and remains green till winter. A valuable grass for pastures. Lb. 12 cts., 10 lbs., \$1.10, 100 lbs. \$9.50.

CREEPING BENT (*Agrostis stolonifera*). Of rapid growth, fine texture and spreading habit. Forms a very close and permanent sod. Especially valuable for lawns. Lb. 38 cts., 10 lbs. \$3.50, 100 lbs. \$34.00.

CRESTED DOG'S-TAIL (*Cynosurus cristatus*). Thrives best on moist, rich soil, but accommodates itself to nearly all soils. Grows well in the crista. Valuable in moderate quantity for permanent pasture and lawns. Lb. 30 cts., 10 lbs. \$2.80, 100 lbs. \$27.00.

ENGLISH, or PERENNIAL RYE GRASS (*Lolium perenne*). Of rapid growth and productive; produces a strong growth in four or five weeks. Made into hay it is rather hard, but is very nutritious and is much relished by cattle and horses. Lb. 15 cts., 10 lbs. \$1.00, 100 lbs. \$9.00.

HARD FESCUE (*Festuca durissima*). A variety of Sheep's Fescue, of dwarf habit; like that, thrives on poor soil and is very hardy. Lb. 25 cts., 10 lbs. \$2.40, 100 lbs. \$22.50.

ITALIAN RYE GRASS (*Lolium Italicum*). Thrives on a variety of soils, producing early and large crops. Though a perennial, it is short-lived and generally treated as an annual. Valuable for soiling. Sown in the fall, will produce a large crop of hay the following season. Lb. 15 cts., 10 lbs. \$1.20, 100 lbs. \$10.00.



CRIMSON CLOVER

(SEE NEXT PAGE)

GRASS SEEDS, Continued

TALL FESCUE (*Festuca elatior*). On strong, moist, or clayey soils, very productive and permanent. Very nutritious, readily eaten by all stock; should form a part of all meadow and pasture mixtures for moist soil. Lb. 25 cts., 10 lbs. \$2.30, 100 lbs. \$21.00.

TALL MEADOW OAT GRASS (*Avena elatior*). A very hardy species, making an early and luxuriant growth and continuing to grow until late in the fall and is, therefore, especially desirable for pastures. It makes good hay and when used for soiling, can be cut several times in the season. Lb. 25 cts., 10 lbs. \$2.20, 100 lbs. \$20.00.

CLOVERS (Prices include Bags)

All prices subject to market changes.

MEDIUM RED (*Trifolium pratense*). The well-known Red Clover. Lb. 25 cts., 10 lbs. to 50 lbs. 24 cts. per lb., 50 lbs. or more, 23 cts. per lb.

MAMMOTH, or PEA VINE (*Trifolium pratense var.*). A variety of the preceding of larger growth. Lb. 26 cts., 10 to 50 lbs. 25 cts. per lb., 50 lbs. or more, 24 cts. per lb.

ALSIKE, or SWEDISH (*Trifolium hybridum*). Hardy, productive, fragrant; succeeds best on stiff, cold soils. Lb. 25 cts., 10 to 50 lbs. 24 cts. per lb., 50 lbs. or more, 23 cts. per lb.

WHITE (*Trifolium repens*). Used in nearly all mixtures for lawns and valuable for pastures. Lb. 60 cts., 10 lbs. \$5.80, 25 lbs. or more, 55 cts. per lb.

CRIMSON (*Trifolium incarnatum*). An annual used for soiling and for plowing under to enrich the soil. Lb. 16 cts., 10 to 50 lbs. 14 cts. per lb., 50 lbs or more, 12 cts. per lb.

ALFALFA (*Medicago sativa*). See page 8.

SWEET CLOVER (*Melilotus Alba*)

This variety of clover can be grown anywhere in the United States. It grows freely along the roadsides and in waste places. As a bee pasture it ranks among the best and before its possibilities as a hay crop were known it was extensively used by bee-keepers as a pasture for bees. Price 22 cts. per pound; 10 lbs. \$2.00; 50 lbs. or more 18c per pound.



MEDIUM RED CLOVER

Grasses, How to Grow Them — Shaw. All varieties, cultivation care, development and use, \$1.50.



JAPANESE MILLET

MILLETS (Prices include Bags)

HUNGARIAN GRASS (*Panicum Germanicum*). Used extensively for forage and to some extent for hay. Withstands drought well, succeeds on ordinary soil, and on rich land two crops may be grown the same season. One bushel, (48 lbs.) to the acre. Pk. 85 cts., ½ bus. \$1 50, bus \$2 75
GERMAN, or GOLDEN (*Setaria Italica*). Of stronger, and taller growth than the preceding and requires richer land. Has an abundant foliage; is, therefore, an excellent forage crop and makes a coarse, rather harsh hay, but which is readily eaten by all kinds of stock if cut at the proper time. 50 lbs. to the bushel $\frac{3}{4}$ to 1 bushel to the acre. Pk. 75 cts., ½ bus. \$1 35, bus. \$2 40.

JAPANESE BARNYARD MILLET

(*Panicum Crus-galli*)
Sometimes called Billion Dollar Grass.
Grows 6 to 7 feet high

The seed from which, so far as known, all the Japanese Barnyard millet now cultivated in the United States has descended was brought to Amherst from Northern Japan by Wm. P. Brooks, now Director of the Massachusetts Agricultural Experiment Station, in 1889. Prof. Brooks, who had become impressed with the great value of the crop for forage, began distributing seed in small quantities to private farmers in various parts of the State. The success of the crop was immediate.

Prof. Brooks adopted the name Barnyard Millet on account of the fact that this millet belongs to the same species as the common barnyard grass, which is so common a weed in cultivated fields in many parts of the United States. The Japanese Barnyard Millet, however, although belonging to the same species, is quite different from the common barnyard grass, having been selected and improved for centuries in the Orient for seed production. The principal differences from a practical point of view are these: The plant is much more erect in its habit of growth. The heads are larger and far more compact. They are practically awnless, whereas the awns are very long and prominent in the heads of the ordinary barnyard grass.

Like all coarse-growing plants it needs abundant plant-food and, when given this on good soil, the yield is immense. While its use has been largely confined into soiling purposes, it may be used for ensilage and is when cut at the proper stage and made to hay, readily eaten by both cattle and horses. It may be sown from May 15 to July. Sow 15 to 25 lbs. per acre. Circulars describing it more freely mailed on application. Lb. 20 cts., 10 lbs. \$1.60, 25 lbs. \$3 75, 50 lbs. or more, 14 cts. per lb.

Be sure to add postage as prices above 1-4 lb. do not include postage unless otherwise noted.

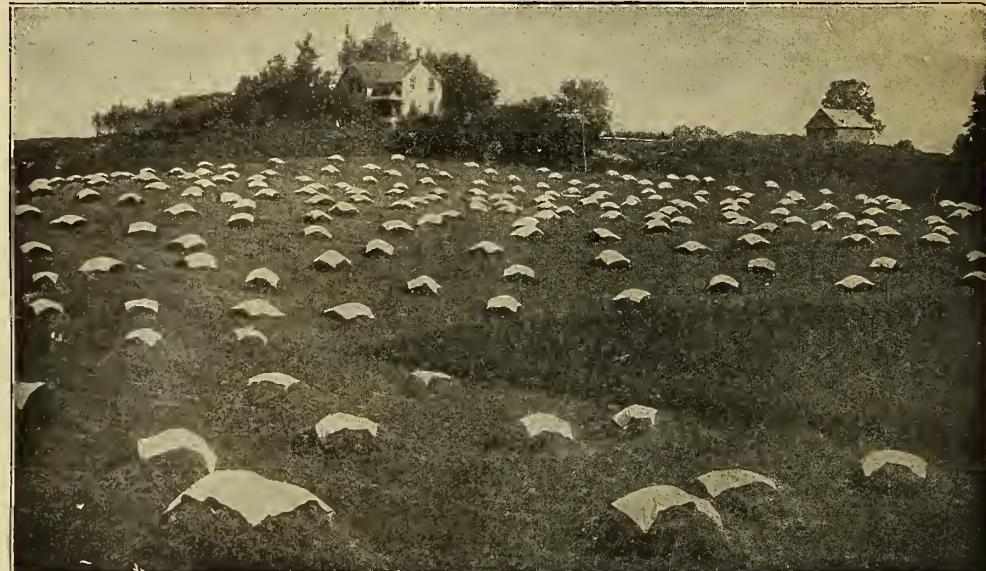
ALFALFA OR LUCERNE CAN BE GROWN IN NEW ENGLAND

GRIMMS NORTHERN GROWN IS RECOMMENDED FOR BEST RESULTS

The growing of Alfalfa in New England has been looked upon in the past as being an impossibility but the bulletins issued by the Department of Agriculture at Washington tell us that Alfalfa can be grown successfully in every State in the Union. We believe that it can be grown on our New England farms, providing it receives the proper treatment. There are certain fixed rules that must be followed in order to make a success of any undertaking and there is no one thing in the farming line where this rule applies more than in growing Alfalfa. Probably nine-tenths of all the Alfalfa seed that has been sown in New England during the past ten years has been thrown away and simply because these rules that must be followed had not been put to use. Alfalfa when once established is nearly as everlasting as the hills. It even in some cases becomes a weed, driving out all other crops. Sowing Alfalfa out of season without proper protection is more disastrous than sowing any of our cereals out of season. Three things are necessary in growing Alfalfa: First, sweet soil, that is soil free from acid. Sour soils can be made sweet by the application of Lime. Second the soil must be well drained. Soil which has been planted to corn or some other hood crop for at least two years is necessary for Alfalfa. It should be thoroughly plowed in the spring and then harrowed at intervals of 2 or 3 weeks or as often as a crop of weeds appear, until about August.

The seed should be covered about one inch deep. This can be done to best advantage by using a horse weeder, after which the ground should be rolled. Alfalfa is one of the leguminous crops and takes its nitrogen from the air providing the soil contains bacteria which is necessary to give it power. It is well to inoculate the seed, whether the soil really needs it or not, for the expense is not large and it can do no harm, and unless the soil already contains this bacteria, it must be applied in some artificial form. Above cut shows ideal manner of curing alfalfa hay.

There seems to be a difference of opinion in regard to where Alfalfa Seed should be grown but so far we have found the most important thing is to get seed absolutely free from adulteration, the principal adulterations found in Alfalfa being dodder and tree-foil. We guarantee our Alfalfa seed to be 99% pure and absolutely free from either of these two things, but our customers can have their seed examined by their experiment station and if either of these seeds are found it can be returned and we will refund your money.



There are several strains of Alfalfa on the market but the agricultural colleges report that Grimm's Alfalfa which is the branched rooted variety is best adapted to our New England soil and climate. The heaving of the soil by spring freezing and thawing is liable to break the tap root and then the plant dies, but with many roots the plant is held more firmly in the soil and if some of the roots are broken, enough remains to keep the plant in good condition. We believe that Alfalfa seed grown in the Northwest is best adapted for New England.

Grimm's price per lb. 75 cts.

Price of Utah grown Alfalfa 35 cts per lb., 50 lbs. or over 30 cts. per lb.

ANTI-MILDEW HAY CAPS

Improved anti-mildew caps 5 ft. 8 inches by 5 ft. 6 inches with ropes and pins for fastening down, \$50 per 100.

You cannot afford to grow alfalfa or other clover without hay caps. They are also handy for covering fall crops.

Farmogerm High Bred Nitrogen Fixing Bacteria FOR SEED INOCULATION

The most important, as well as the most interesting developments in agriculture in recent years have to do with the bacteria of the soil.

NITROGEN-FIXING BACTERIA

It has long been known that clovers and other legumes will sometimes grow well in poor or wornout soil, and leave the soil richer in nitrogen and organic matter. The ability of these crops to grow in soil which is deficient in nitrogen, and to add nitrogen to the soil for succeeding crops of other kinds, is due to certain bacteria which live and multiply in the roots of the plants and take nitrogen from the air and change it into albuminates which are later converted into soluble nitrates—one of the most important of plant foods. The growing crop is thus supplied with all the nitrates it needs, and in addition large quantities of nitrates are left in the decaying roots for following crops of any kind. These bacteria usually form small nodules or swellings on the roots of the plants, and these nodules contain nitrates and are an indication of the presence of the bacteria. Without these bacteria, legumes, like other crops, either will not grow, or if they do grow will exhaust the soil of its available nitrogen. With these bacteria, legumes add nitrogen to the soil.



COST OF FARMOGERM

Small Farm Size	5 acres	\$9 00
Trial Farm Size	1 acre	2.00

Garden size, enough for 400 ft. row, put up in separate culture for garden peas, garden beans, sweet peas, and white clover, 50 c.

Garden size, put up in mixed culture, good for peas, beans and sweet peas, 50 c. each.

One-half garden size, for peas, beans and sweet-peas, 25 c.

Farmogerm is put up for the following crops, excepting mixed clovers.

Alfalfa or Luce.ne	Japan Clover
Red Clover	Garden Peas
Mammoth Clover	Chick Pea or Garbanza
Crimson Clover	Canada Field Peas
Alsike Clover	Sweet Peas
White Clover	Cow Peas
Burr Clover	Soy Beans
Sweet Clover	Garden Beans
Yellow Clover	Lima Beans
Yellow Trefoil	Vetch (Spring and Winter)
Berseem Clover	Legumes

We also put up mixed or composite cultures in one and five acres sizes as follows:

No. 1—Good for Red, White, Crimson, Alsike, Mammoth and Berseem Clovers.

No. 2—Good for Alfalfa or Lucerne, and Sweet Clover.

No. 3—Good for Vetch and Canada Field Peas.

No. 4—Good for Soy Beans and Cow Peas.

No. 5—Good for Garden Peas, Garden Beans and Sweet Peas.

In ordering, always state for what you wish Farmogerm.

Terms cash with order.

Free delivery to any point in the United States.

Selected Northern Grown Seed Oats

It pays to buy the best, whether you wish to cut for green feed or are sowing for grain.

Do not deceive yourself by thinking that you can buy oats in any grain store that will produce as much as you will get from seed that is grown especially for seed purposes. You will not only lose in the yield per acre, but you are also liable to get foul seed that will be hard to get rid of.

Our oats are recleaned and are as pure as men and machines can make them. We have proven to our entire satisfaction that in the stover, alone, you will get enough more feed in value to pay the difference in cost of seed over buying cheap seed that you will get at your grain store.

FANCY SEED OATS

Owing to the continued wet weather during the harvesting season where our crops were grown we have been unable to secure a good bright sample of our usual varieties of oats and for this reason we offer here a "Fancy Seed Oat." By this we mean good heavy seed of excellent color which has been carefully recleaned and which is of high germination.

These have been selected from several cars from which we have had a sample and while we do not know the variety, for those who sow this grain for oat hay or for green feed we would strongly recommend them. We believe that for those who do not care to invest the amount necessary to buy the named varieties, this is an excellent opportunity. Although there is no name attached to these oats they are probably of pedigree stock.

Price	\$
per bushel	1.20
2 bushels	2.25
10 bu. lots or over	\$1.00 per bu.

MONTANA CLUSTER OATS

This is a wonderful productive oat. Our seed is all grown in Montana and the seed which we offer is white and plump and free from foul seed. We believe this oat to be equal in value to the varieties which we have been offering in the past but which on account of the unfavorable weather we are unable to supply this season. This variety is a very heavy yielder exceeding many of the well known varieties when grown side by side. It has tall stiff straw which stands up well and doesn't lodge. Heads are long and loose, somewhat different from the so-called "side-oats." It will mature medium early; a few days only after the extra early kinds.

As our supply of this variety is limited we would advise placing orders early. While we hope to maintain the prices throughout the season, on account of the unsettled conditions of the market at the time this catalogue goes to press, these prices will be subject to market changes.

Please take notice that our prices include bags as we ship oats into so many different states that it would be too expensive to have the bags returned.

Prices:

	\$
Bushel	1.40
2 bushel	2.75
10 bu. lots or over	1.25 per bu.



MONTANA CLUSTER OATS

Grain and Miscellaneous Seeds for Forage Crops

While we shall endeavor to maintain throughout the season the prices of these seeds, all quotations are SUBJECT TO CHANGE WITHOUT NOTICE if the market changes greatly. All prices include bags.



SUDAN GRASS

SUDAN GRASS. A New Forage Crop of Immense Value. Sudan grass is strictly an annual and dies each year like Millet and must be seeded again each spring. This makes it fit admirably into any system of rotation and while it does not benefit the soil like legumeo it does afford a crop rotation that is good for the soil. Sudan grass reaches a height of from seven to nine feet yet the stems are small and tender. The plant stools wonderfully and produces under favorable conditions as many as 100 stalks from a single root. The seed should not be planted until the soil has become warm in the spring and preferably on warm light soil. Sudan grass will grow better if planted in rows and cultivated but may be sown broadcast seeded in rows 36 in. to 42 in. apart 2 to 3 lb. per acre broadcasted 16 to 24 lb. per acre. Cut just after bloom so ample time may be had for second growth. Lb. 20 cts., 10 lbs. or over 18 cts. per lb.

RYE

For grain, 1 bus. to the acre; for forage or soiling 1½ bus. 56 lbs to the bus.
Prices include bags.

SPRING. This is excellent for a catch-crop as it may be sown somewhat later than other grains and produces an abundance of green feed in the summer season. Pk. 60 cts., bus. \$2.10, 2 bus. \$4.00.

WINTER. This variety is fast gaining in popularity as a cover crop and produces an abundant crop of early green feed. If allowed to mature will produce a heavy crop of grain and a fine quality of straw if cut about July 1. Pk. 45 cts., bu. \$1.65, 2 bu. \$3.10.

WHEAT

1½ bus. to the acre, 60 lbs. to the bus. Prices include bags.

SPRING—SASKATCHEWAN FIFE. A very hardy and productive red variety. Pk. 65 cts., bus. \$2.15, 2 bus. \$4.20.

WINTER—RED CLAWSON. A very popular variety. Pk. 60 cts., bus. \$2.10, 2 bus. \$4.10.

WINTER-KLONDIKE. A remarkably productive bald white variety, grain large and plump. A favorite with millers. Pk. 60 cts., bu. \$2.10, 2 bu. \$4.10.

BUCKWHEAT

For grain, 1 bushel to the acre; for soiling 1½ bushel. 48 lbs. to the bushel.

JAPANESE. Earlier, yields better and grain is larger than that of other varieties. Pk. 50 cts., bus. \$1.75, 2 bus. \$3.25, bags included.

SILVER HULL. Early and productive, and a favorite with millers because it makes more nearly white flour than others. Pk. 50 cts., bus. \$1.75, 2 bus. \$3.25, bags included.

BARLEY

For grain, 2 bushels to the acre; for forage, 3 bushels, 48 lbs. to the bushel.

CHEVALIER. A two-rowed variety. Head is a little longer than the six-rowed varieties and the grain is larger, plump, extra-heavy and in favorable seasons nearly white. On account of its attractive appearance and fine quality, the grain brings the highest price, while the variety is extensively grown for green forage. Pk. 65 cts., bus. \$1.85, 2 bus. \$3.50, bags included.

MANSURY. A six-rowed variety, largely grown for forage. Pk. 60 cts., bus. \$1.85, 2 bus. \$3.50, bags included.

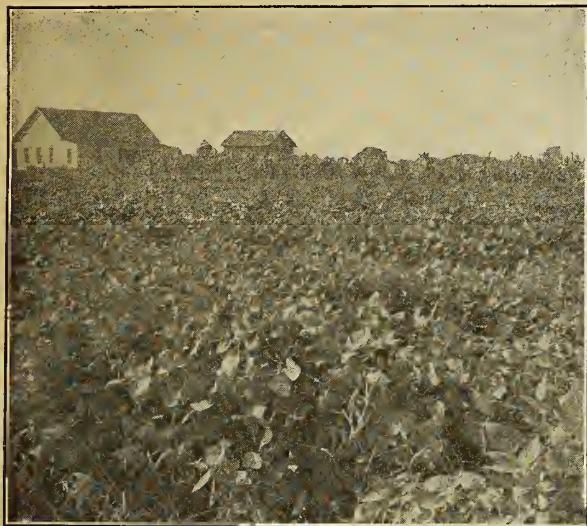
BEARDLESS. Earlier than any of the bearded varieties and is generally considered more hardy. The straw is heavy and stands up well under a large crop. Very popular for forage and especially valuable for hay as the heads are entirely free from beards which when dry are thought to often be injurious to cattle. The grain, while it germinates well, is always light in weight and of rather inferior appearance and, though a productive variety, the chief value of the Beardless is for forage or hay. Pk. 60 cts., bus. \$1.85, 2 bus. \$3.50, bags included.



KLONDIKE WINTER WHEAT

Leguminous Plants for Forage and Soiling

THE NITROGEN GATHERERS AND HUMUS PRODUCERS



FIELD OF COW PEAS

While the use of the legumes—Canada Peas, Cow Peas, Soy Beans and Vetches—is increasing, their value is not yet so generally recognized as it should be. Not only are they valuable as a supplement to the hay crop but are perhaps of greater value as soil enrichers. They can generally be successfully grown on soils too light and poor to produce a good crop of clover and are not only soil enrichers but, when the crops are plowed into the soil, are great humus producers as well.

COW PEAS

In drills one bushel to the acre. Broadcast, 2 bushels. 60 lbs. to the bushel.

Cow Peas are as tender as Beans and therefore the suggestion sometimes made that they may be sown with Oats is unwise. As they are of very rapid growth during the warm season they may in this latitude be sown as late as the first of July with a reasonable expectation of a crop suitable for fodder or plowing under.

Cow Peas produce an enormous bulk and for this reason the plant is a favorite with some as a forage plant and also as a humus maker when plowed into the soil. It is, of course, like all the legumes a soil enricher as well. The Cow Pea will grow on all kinds of soils from stiff clay to sandy, barren uplands, and used either as green fodder, hay or as silage, the product is of high feeding value. While for plowing under on stiff clay soils the growth should be turned under while green, it is generally considered that on light sandy land the vines should be allowed to partially decay on the surface before they are plowed into the soil. All crops seem to do well after Cow Peas.

WHIPPOORWILL. The most popular variety in the North, very early.

Pk. 90 cts., bus. \$3.25.

NEW ERA. A new extra early variety, earlier than the Whippoorwill, maturing in about 60 days. Pk. \$1.00, bus. \$3.50.

VETCHES

One bushel to the acre, with oats or rye, $\frac{1}{2}$ bus. 60 lbs. to the bushel.

SPRING VETCH, or SPRING TARE. This, like Field Peas, is used for both green fodder and for plowing into the soil. In this latitude it can be sown only in the spring and is more largely used in this season than the Hairy Vetch which may be sown either in the spring or fall. Thriving better on rather poor soil than Canada Peas, its use is rapidly increasing as a green fodder crop. Lb. 15 cts., 10 lbs. \$1.20, 25 lbs. \$2.75; 100 lbs. \$10.

WINTER, SAND, or HAIRY VETCH. (*Vicia villosa*) While this will be of much larger growth on good soil and should be grown on such soil when the crop is designed for green fodder or hay, it thrives remarkably well on light, poor soil. Though it produces on good land an enormous crop and whether used green or as hay is more nutritious than Clover and readily eaten by all kinds of stock and is therefore a profitable crop to grow for feeding, it is perhaps of greater value for other purposes. No other legume surpasses it as a nitrogen gatherer and no other equals it as a cover crop. It is perfectly hardy, remaining green all winter and is therefore much superior to Crimson Clover in the Northern States as a cover crop. It also produces a much larger bulk than Crimson Clover and is therefore superior to it as a humus maker. In this respect as well as a cover crop it is fully equal to Winter Rye and is superior otherwise as, in common with other legumes, it adds nitrogen to the soil. Though rather slow in starting in the spring, when once started it grows rapidly and will generally, by May 1, have made a growth of 18 inches or more. As the stems are rather weak, it is generally sown with grain which serves as a support. Seed is usually sown in August or September at which time either Rye or Wheat may be sown with it. If sown in the spring Oats are generally sown with it but sometimes Barley is used. When sown at this time the crop is generally used for feeding. Lb. 30 cts., 10 lbs. \$2.50, 25 lbs. or over, 22 cts. per lb.

SOY, OR SOJA BEAN

$\frac{1}{2}$ to $\frac{3}{4}$ bushel to the acre in drills $2\frac{1}{2}$ to 3 feet apart.

This is another valuable legume, growing in favor for forage and ensilage, often succeeding well on land too light for clover. While it has not been so generally grown in this country as the Cow Pea it is considered by some preferable for the North as it does not require so long a season. This is especially true of the Early Green which is said to produce large crops as far north as Canada.

MEDIUM EARLY YELLOW. Pk. 90 cts., bus. \$3.00, bags, 2 bus. \$5.75.

EARLY GREEN. Pk. \$1.25, bus. \$4.50, bag, 2 bus. \$8.75.

PEAS, CANADA FIELD

$1\frac{1}{2}$ bushel to the acre; with oats, 1 bushel. 60 pounds to the bushel.

For the Northern States on good soil there is probably no forage crop of greater value than Field Peas, sown either alone or with oats, rye, or Canada peas, and often a good crop may be grown on land that has already produced a crop of some of the early-maturing grains. In the Northern States seed may be sown from the latter part of May to last of July; in the South, in September or early in October. Sheep and swine may be turned into the field and allowed to remain until the crop is eaten but as cattle waste much of the forage by pulling up the plants it is preferable to cut the rape and feed it to them. This is not only a more economical method but also permits of the feeding being made at a time when it is the least liable to taint the milk—that is just after cows have been milked. With sheep and cattle care should be taken at first not to allow them to eat too much as there is danger of injury from bloating, nor is it safe to turn them into the field or to feed them the rape when it is wet. There is, however, but little, if any danger of bloating with swine. Animals should have free access to salt at all times when pastured on this crop. When conditions are favorable the crop is ready for pasturing about eight weeks after sowing seed. By sowing seed early in the spring and at intervals of two or three weeks, a continuous supply of feed or pasture can be obtained and at a time when the permanent pasture is liable to be short. Rape will endure quite severe cold weather and therefore will furnish feed for a considerable time after the ordinary pasture. True Essex-grown seed of our own importation. Lb. 15 cts.; 10 lbs. \$1.20; 25 lbs. or over, 11 cts. per lb.

DWARF ESSEX RAPE

Sown in drills $2\frac{1}{2}$ feet apart, 3 lbs. to the acre. Sown broadcast, about 6 lbs.

Rape has a high feeding value. It makes an excellent food for fattening sheep and swine and is a good milk-producing food for cows. It is used for both pasturing and as a soiling crop, and is sown either alone or with oats, rye, or Canada peas, and often a good crop may be grown on land that has already produced a crop of some of the early-maturing grains. In the Northern States seed may be sown from the latter part of May to last of July; in the South, in September or early in October. Sheep and swine may be turned into the field and allowed to remain until the crop is eaten but as cattle waste much of the forage by pulling up the plants it is preferable to cut the rape and feed it to them. This is not only a more economical method but also permits of the feeding being made at a time when it is the least liable to taint the milk—that is just after cows have been milked. With sheep and cattle care should be taken at first not to allow them to eat too much as there is danger of injury from bloating, nor is it safe to turn them into the field or to feed them the rape when it is wet. There is, however, but little, if any danger of bloating with swine. Animals should have free access to salt at all times when pastured on this crop. When conditions are favorable the crop is ready for pasturing about eight weeks after sowing seed. By sowing seed early in the spring and at intervals of two or three weeks, a continuous supply of feed or pasture can be obtained and at a time when the permanent pasture is liable to be short. Rape will endure quite severe cold weather and therefore will furnish feed for a considerable time after the ordinary pasture. True Essex-grown seed of our own importation. Lb. 15 cts.; 10 lbs. \$1.20; 25 lbs. or over, 11 cts. per lb.



SOY BEANS

ROSS'S EUREKA ENSILAGE CORN

has a record of 70 tons and 800 lbs. of corn grown on one acre. Enough to feed 7 head of cattle for one year and enough left over for 261 days, feeding at the rate of 50 lbs. per day.

This corn was originated in Virginia about 25 years ago and has been grown on the same farms there for us ever since. It is the result of careful selection for many years from the old southern prolific corn which often has 5 to 8 ears on a stalk. This selection was made with the view of getting a larger ear and more foliage. It has been grown entirely away from other kinds and it is a distinct variety and a great improvement over any other Southern White Dent Corn.

Corn has been offered by others under the name of Eureka but is simply the common Southern White that they are offering and at the time of cutting there will be as much difference as there is between Crosby and Stowell's Evergreen. Eureka is a Smooth White Dent Corn with short kernels, while many of the southern white varieties have the horse tooth kernels. There is but one Eureka Ensilage Corn and that is put up in our trade marked bags. Be sure and get the genuine. Either buy direct from us or other dealers who are handling it in our trade marked bags.

ROSS'S EUREKA ENSILAGE CORN grows the tallest, has the most leaf, will produce more tons of good material for the silo than any other kind. Eureka Corn not only grows the tallest, has the most leaf, but is as well very productive of ears. In the South it usually yields about 100 bushels of shelled corn per acre and sometimes considerably more. In the Northern states Eureka should be sown strictly as an ensilage variety for it will get into proper condition for cutting early in September. Its value for ensilage is due to its enormous growth and great production of leaf and ears. Matured corn should never be put into a silo.

We sell other varieties of corn used for ensilage and if it is desirable to have a variety of corn that will mature its ears, then to our customers in the Northern states we will recommend some such variety as Leaming or Mastodon. While Eureka Corn will not mature its ears in any of the Northern States where frosts are expected early in September, we have seen ears far enough advanced so it will not doubt germinate all right grown right here in Massachusetts. If ears are wanted they can be had on Eureka by planting it thin and where frosts hold off until the first of October, you will get plenty of ears and more leaf than you will get from any other variety of corn grown, but if the main purpose of the silo is to preserve in as nearly as natural condition as possible the largest amount of fresh green foliage, and large fresh green ears which can be grown on the smallest possible area, then Eureka is the corn to grow. In our opinion and in the opinion of hundreds of the best farmers in the United States, this is the best corn in cultivation.

We have the best crop of Eureka we have ever grown and while our sales last year were many times what they were on all other varieties combined, our customers can depend upon getting seed that will germinate as near 100% as is possible to get it for season of 1915.

All Eureka Corn is shipped from Worcester put up in $\frac{1}{2}$ pk., peck, $\frac{1}{2}$ bus., and 2 bus. bur-lap bags and in crates holding 70 pounds of selected ears. Each bag is marked "Eureka Ensilage Corn, from Ross Bros. Co.," and has our trade mark shown on this page. To get the genuine buy of us or of dealers who you are sure bought their supply of us this year. There are thousands of old Eureka Corn bags around the country, some of them have been filled with common corn and sold as Eureka. Compare the corn with the kernels illustrated below before you take it. The best way is to send your order direct to us. The saving of 25 cts per acre on seed usually means the losing of \$5.00 to \$25.00 at harvest time. The best seed is always the cheapest.

When is the proper time to cut Ensilage? As corn is simply overgrown grass and everyone knows that grass should be cut when it is in the blossom, then corn should be cut when it is in that same condition. Don't look for the ear; simply watch the tassel. It is better to cut corn too early than too late. Mature ears should never be put in the silo. The grain bin is a much better place. The silo was not invented as a substitute. Read what Webster's Dictionary gives as a definition of these two words, "silo" and "ensilage".

Eureka Corn has a record of 70 tons and 800 pounds of green corn from one acre. This record was made by weighing one square rod taken from an acre which was first divided into four equal parts, and the weighing was done by three reliable disinterested parties. We have several estimates of even more than this and we believe that this record can be broken. For that reason we will offer the coming season 1915, \$100 in Gold to the first party who will give us positive proof of an acre of Eureka Corn weighing more than the above amount.

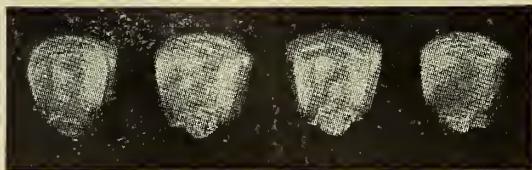
Conditions: The field winning this prize must contain at least one acre. It must be divided into four equal parts and one square rod cut and weighed from each of the four parts by three disinterested parties. The product of the four square rods multiplied by 40 will give the net weight per acre. Where it is convenient to do so we would prefer to have the entire crop weighed.

This is a chance for someone to get \$100 in Gold and enough corn to keep 7 cows for a year from one acre.

Price $\frac{1}{2}$ pk. 40 cts., pk. 75 cts., $\frac{1}{2}$ bus. \$1.25, bus. \$2.50, 2 bus. bag \$4.90, 10 bus. lots and over, \$2.35 per bus., selected ears, crate \$3.50. 70 lbs.

We do not sell less than a full crate of ears.

Don't buy a bushel of "Eureka Corn" unless it has our trademark printed on the bag. There is nothing just as good, and you take a chance of losing as many dollars as you save cents.



This illustration shows the shape and type of corn that you get when you buy the genuine Eureka. If anyone should ship you corn with a long slim kernel, send it back, for it is not Eureka.

Many of our customers write us that Eureka Corn is very sweet, and while we have never had it analyzed to ascertain the amount of sugar, we are confident that it contains as much as most of the so-called sugar or sweet varieties, and we all know that sugar will make milk.

DON'T TAKE OUR WORD FOR IT

Look at the illustration below. This is made from a photograph of a field of Eureka Corn which yielded 70 tons 800 pounds on one acre.



View of the Field of Corn Grown by Mrs. H. Will Harris, Michigan.—Winner of Our \$50.00 Gold Prize for Heaviest Yield of Eureka in 1911.
Yield, 70 Tons 800 Pounds—Enough to feed seven head of cattle for one year and enough left over for 261 days. This is some corn.

READ WHAT SOME OF OUR CUSTOMERS SAY ABOUT ROSS'S EUREKA CORN.

ROSS BROS. Worcester, Mass.

GENTLEMEN:—The Eureka Ensilage Corn seed bought of you last spring was the finest corn for ensilage that was ever grown in this part of Michigan. This is the common remark of all farmers who have seen it, and the corn is fine, too. We grew one acre on a fine, clay loam, which weighed over 50 tons of fodder and corn, and there will be, when husked, over 100 bushels of good, sound, ripe ear corn. This acre was planted May 15th. We also grew two acres of this corn on a good gravelly loam, one of these grew the 70 tons, and the other one something less.

From these two acres we have kept 5 cows, 4 horses, a number of hogs, geese, etc., since the last of July. We have filled a small silo, about 45 tons, and are still feeding off these two acres. This corn grew from 15 to 20 feet high and had from 3 to 5 ears of good corn. The foliage was so broad and tropical in appearance that several city ladies are begging a few kernels to plant on their beautiful lawns. Everything eats it as if it were sweet corn, the cattle, horses, hogs, geese, etc. The stalks, of course, are large but tender, and there was little waste when fed green from the field. We gave some of the green corn to several neighbors and they praised it, saying "It was excellent."

Sincerely,
MRS. H. WILL HARRIS.

The Eureka Ensilage Corn is very fine; some stalks measured 17 feet 3 inches and had from three to five ears on a stalk, also it has a heavy foliage. It is the best I ever used.

JAMES BIRKETT,
Virginia.

WILLIAMSTOWN, VT.

ROSS BROS. Co., Worcester, Mass.

GENTLEMEN:—Your letter of December 12th at hand, and in reply will say that we never had such a growth of corn as we did last summer when we planted Eureka corn. I cut a number of stalks of corn that would measure 17½ fe to 18 feet high.

The best one I found was 18 feet 3 inches from tip to tip and weighed 12 pounds. We planted 4½ acres and we filled two silos that hold seventy-five tons each and there was enough corn left over to feed sixty cows, three weeks, twice a day, so I think we must have had nearly 260 tons of ensilage and I believe it to be the sweetest ensilage we ever had. We like it very well.

Will you please send me a catalogue of your machinery and corn, and other seeds. Hoping I will hear from you I remain,

Yours respectfully,

FRED L. POOR.

PLAINFIELD, N. J.,

The best I have ever grown. Two, three and four ears on a stalk, 14 feet high, full of leaves.

JUSTUS H. COOLY, M. D.

FREMONT, IND.

ROSS BROS. Co., Worcester, Mass.

GENTLEMEN:—I have raised your Eureka corn for three years with success. It turned off about twenty ton per acre and makes excellent ensilage.

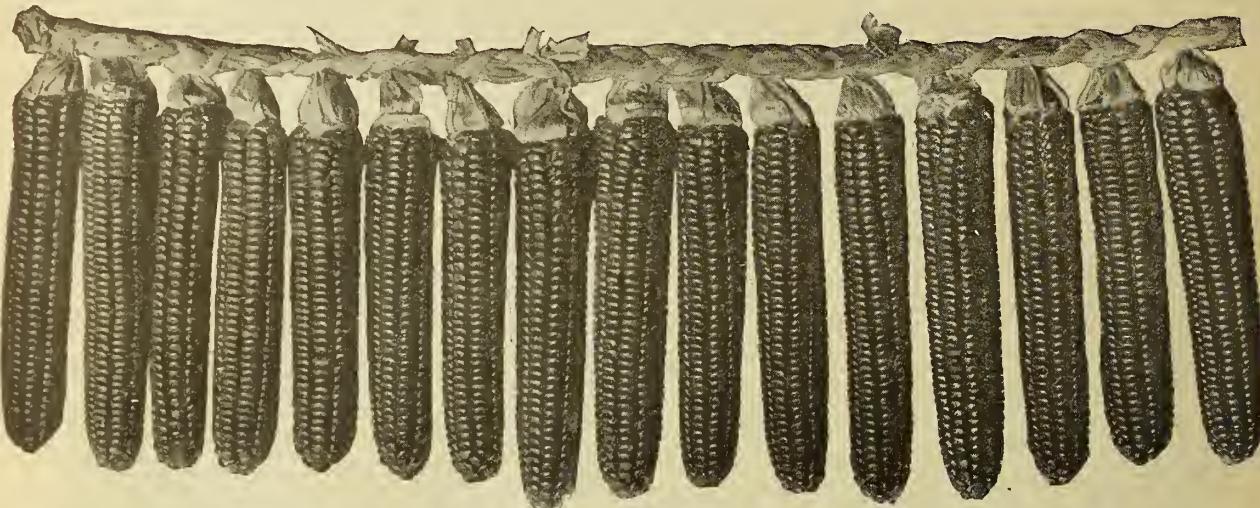
L. G. BROWN.

The Sheffield World's Prize Flint Corn

THE BEST KIND OF FLINT CORN TO PLANT FOR GRAIN

**Sheffield Corn won in 1910 at the New England Corn Exposition, held in Worcester,
the first Prize for the largest yield of corn from an acre—**

123.8 bushels of Crib-Dry Corn.



SHEFFIELD WORLD'S PRIZE FLINT CORN which we introduced in 1911 is an early eight-row variety which has been grown in Vermont since 1867. The seed was brought to Sheffield, Mass., and has been grown in that town ever since. The ears of this corn have a very compact form, usually well capped at the tip, similar to the Improved Canada. The average length of the ear is 8 to 8½ inches, the kernels are very broad. This corn exceeds in proportion of corn to cob any other variety. In a trial made by Mr. Chapin, who won the first prize at the first New England Corn Show held in Worcester, in 1910, he found that it took but 63 lbs. of ears to make a bushel of 56 lbs. of shelled corn. This corn will mature in 90 to 95 days. Corn on our farms planted June 11 was safe and germinated very high, with a frost September 7.

This is the corn that won the first prize for the heaviest yield per acre at the New England Show in Worcester, 1910. That yield was 123.8 bushels of crib-corn from one acre.

Sheffield corn is a safe variety to plant where early frosts are expected or in states where the season is generally short. While it may be possible under favorable conditions and high fertilizing to produce more bushels of corn of some of the longer varieties, in our opinion the Sheffield is the safest and surest kind to plant for a general crop. We have not been able for the past three seasons to anywhere near fill our orders on this variety but as the past season has been more favorable we hope to be able to get enough of this to fill our orders, but in ordering we wish our customers would state whether we could substitute in case we should be out.

For the information of those who may not know what the term "crib-dry" implies we may say that it is a condition of corn when it contains but 12 per cent. of moisture. Most corn contains at time of harvesting a considerably greater amount of moisture, therefore, that all competing crops might be judged by the same standard, the conditions of competition at the New England Corn Show required that the yield should be determined by analysis at the experiment station of the state in which the crop was grown on a water-free or 12 per cent. moisture basis which is considered the condition of corn when fit to mill or market and known generally as "crib-dry."

Price qt. 20 cts., 2 qts. 35 cts., ½ pk. 60 cts., pk. \$1.00, bus. \$3.50.

Sheffield Corn was awarded a Silver Medal at the October Exhibition of the Worcester Horticultural Society, 1912.



Silver Medal awarded W. D. Ross, by the Worcester County Horticultural Society for Sheffield Corn.

LONGFELLOW FLINT

Pride of the North	"	2.10	"	"	"	4.00
King of the Earliest	"	2.10	"	"	"	4.00
White Cap Yellow Dent	"	2.10	"	"	"	4.00
Red Cob Ensilage	"	2.10	"	"	"	4.00

Leaming Corn

Leaming Corn	Bu.	\$2.10	Bag	2 Bu.	\$4.00
Hand Picked	"	2.45	"	"	4.70
Meat and able seasons has \$2.40, 2 bus. or more, \$2.30 per bus.	"	2.10	"	"	4.00

EARLY CANADA

Improved strain. This strain is in most respects identical with the original, but the ears are longer and stalks are of slightly larger growth. Ears of the original are about six inches in length, while of this strain they are about two inches longer, and of similar or nearly identical strains known as Early Greenfield, Deerfield and Connecticut Valley, ears are often nine inches or longer. While in the hands of different growers the type has been largely maintained, the tendency to select larger ears has been followed by an increased growth or size of stalks making such strains later in maturing. We prefer and endeavor to procure a strain of which the ears are about eight inches long with as small stalks as possible because earlier and more distinct from other varieties, and also more desirable for light soils of only average fertility and for late planting. On stronger and richer soils there are other varieties which would probably be preferable, though because of its earliness therefore, the more nearly certain maturity in unfavorable seasons, its great production of ears and more easily handled dry fodder it is preferred by some for planting on their best and richest land. Pk. 65 cts., bus. \$2.40, 2 bus. or more \$2.30 per bus.

IMPROVED LEAMING

The Leaming corn was originated in Ohio in 1826 by Mr. J. S. Leaming. This corn was taken to Illinois by the late Hon. E. E. Chester of Champaign County, Ill., over fifty years ago and since then many strains and varieties have been started from this, one of the oldest known varieties of dent corn.

The True Improved Leaming which we offer is a pure, fixed, and distinct variety, having been bred for earliness of maturity, size, shape and color also for the amount of grain that each ear will produce and in doing this the fact is brought out that the True Leaming is second to none (save our Eureka) in the amount of silage that can be grown per acre.

While Leaming corn is not grown extensively in our New England States to maturity, it is perhaps grown for silage to a greater extent than any other dent variety except our Eureka. It ranks as one of the early dent corns, has a very heavy stalk growing twelve or thirteen feet high and very leafy. The ears are eight to ten inches long filled with medium sized but deep kernels which when dry perhaps approach more closely in hardness the flint type than any other dent corn.

We have offered for a number of years two grades of this variety. Our Regular Commercial Grade which is the good corn from the whole crop. Our Choice Grade which is handpicked from selected ears.

Regular Grade, price pk. 50 cts., bus. \$1.75, 2 bus. \$3.40. Bags incl. ded.

Choice or Handpicked, price pk. 60 cts., bus. \$2.10, 2 bus. \$4.00.

CORN, Feed, Fodder and Ensilage



The following varieties are those which have been well tried and have been proven to be the most desirable. The seed we offer was grown for us on contract by the most reliable growers, and has all been tested as to its germination.

WHITE CAP YELLOW DENT. Nearly as early as the Pride of the North with larger ears. The introducer says he will guarantee this corn to mature in ninety to ninety-five days from planting and to produce a larger crop on poor soil than any other variety. Stalks eight to nine feet high, with an abundance of foliage. Ears about eight inches long, sixteen or eighteen rowed, and well filled with deep kernels, the outside ends white, the balance light yellow which gave it the name "White Cap." The early and great production of ears and abundant foliage should make this a popular variety with those who desire ears well advanced toward maturity at the season for cutting for the silo. In this respect it is probably superior to the popular Early Mastodon, as, though the ears are not as large, they are considerably nearer maturity at the season for cutting for ensilage, while the stalks are of good size and fully as leafy. Pk. 50 cts., bus. \$1.75; 2 bus. \$3.40. Bags included.

EARLY MASTODON. A dent variety second in popularity to the Leaming. Ears are the largest of any of the early strains of dent corn while the plant is the most productive of all the dent varieties. The stalks grow about the same height as the Leaming, possibly a little taller and are very leafy. On account of its early and remarkable production of large ears it is a favorite with some for ensilage. Unfortunately, though the ears are produced earlier owing to the large, soft kernels they require a long time to ripen. Seed therefore is difficult to cure in the ordinary way in the time which can be allotted to it and is, in usually warm spells in early spring, liable to heat after being bagged. For this reason we now offer only seed which has been kiln-dried. This treatment will we think prevent any tendency to heat and though it adds a trifle, to the cost, this is hardly comparable with the increased value of the seed because of its more certain germination. Regular Commercial grade. Pk. 50 cts., bus. \$1.75, 2 bus. \$3.40. Bags included.

RED COB ENSILAGE. A large, tall growing variety, popular for ensilage. Pk. 60 cts., bus. \$1.60, 2 bus. or more, \$1.50 per bushel.

KING OF THE EARLIEST. This dent variety, a selection from the Pride of the North, made by the originator of that variety, is from ten days to two weeks earlier, which we think makes it safe for planting in this latitude for the purpose of maturing grain. The cob is small and although the ears are not long the kernels are very deep and the yield is large. We may say here that more attention is being given in the East to the dent varieties for growing for grain than formerly and they are in a few localities grown almost to the exclusion of the flint type, the growers claiming a much larger yield from the dent. Pk. 50 cts., bus. \$1.75, 2 bus. \$3.40.

PRIDE OF THE NORTH. An early dent variety which has been grown in the East to some extent for grain and to a greater for ensilage. Although not of as rank growth as other varieties of this type, it is on account of its early production of ears popular with some for the latter purpose, especially with those having cold clayey soil. Pk. 50 cts., bus. \$1.75, 2 bus. \$3.40.

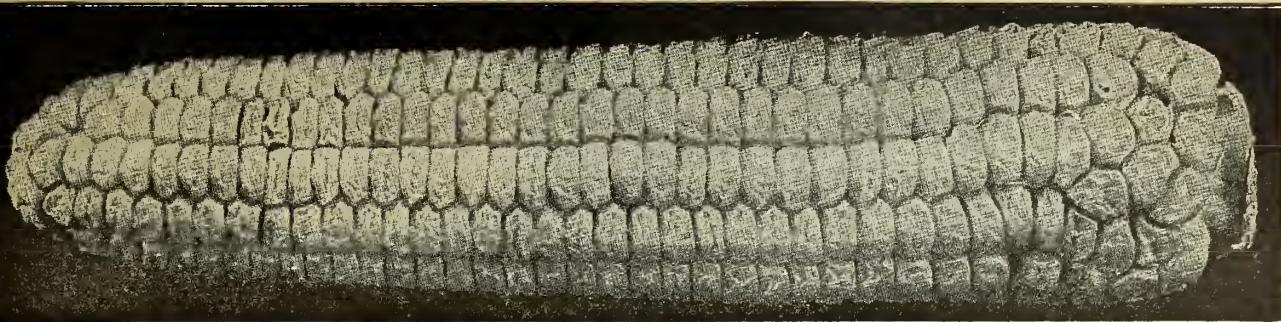
SANFORD WHITE FLINT. An eight-rowed white flint variety, the popular type in Rhode Island, being cultivated there almost to the exclusion of the yellow flint. The ear of the strain which is more generally grown there and which we offer as the Rhode Island strain, is of about the same size as the Improved Canada, resembles it very closely, except in color, having the same broad kernel and well-filled tip, and ripens with or very close to it. The variety is rather more leafy than other flint varieties, which is doubtless the reason of its popularity for ensilage in the northern part of New England. The strain, however, which is more largely grown for ensilage, is seed which is grown in the West, and distinctly different. The stalks grow much taller and are more leafy and the ear is much longer and later in maturing.

SANFORD WHITE FLINT. Rhode Island Strain. Pk. 60 cts., bus. \$2.10.

SANFORD WHITE FLINT. Large Strain. Western grown. Pk. 50 cts., bus. \$1.75, 2 bus. or more, \$1.70 per bus.

SWEET FODDER. Mostly Evergreen and Mammoth. Pk. 75 cts., bus. \$2.25, 2 bus. or more, \$2.20 per bushel.

Grasses, How to Grow Them—Shaw. All varieties, cultivation, care, development and use, \$1.50



EARLY RED CORY

SWEET CORN

A quart will plant about 200 hills, 12 to 16 quarts to the acre.

Sweet corn should not be planted until ground is warm, and cannot usually be safely planted in this latitude much before the middle of May. The small, early varieties may be planted in the garden as close as $2\frac{1}{2}$ by 2 feet, but in

the field, are generally planted 3 by 2 or $2\frac{1}{2}$ feet. In the small garden, however, a more economical use of space can be made and the product secured a little earlier by making rows several feet apart, planting in the intervening space any early, low-growing crop like radish, spinach, or lettuce, and following this with a second crop of cucumbers for pickles, winter squash, celery or turnips, the corn ripening in time for the removal of the stalks before they greatly interfere with the growth of the second crop. The later and larger varieties require more room. Corn thrives best on warm, rich soil and succeeds only when given frequent but shallow cultivation. But three stalks should be allowed to grow to a hill.

Prices at counter are the same as by express. All prices include bags.

PEEP-O'DAY. The earliest; productive. Stalks $3\frac{1}{2}$ to $4\frac{1}{2}$ feet high. Ears twelve-rowed, about 6 inches in length. Kernels white, sweet and of good size. $\frac{1}{2}$ pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 50 cts., $\frac{1}{2}$ pk. 85 cts., pk. \$1.40, bus. \$4.25.

EARLY MAYFLOWER. A new extra early white variety with large well-filled ears; very sweet and tender. Ready for the table 4 or 5 days ahead of Red Cory. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts., 75 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00.

EARLY RED CORY. The most popular early variety. Ears 6 inches long; kernels broad, from reddish amber to nearly white; cobs mostly red. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

POCAHONTAS. One of the earliest varieties, similar to White Cob Cory; ears are large, evenly and compactly filled with tender white kernels of very fine quality for a first early variety and runs very uniform as to type and productiveness. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 75 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00.

EARLY WHITE CORY. A selection from the Red Cory, both kernels and cob white; otherwise identical. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

MAMMOTH WHITE CORY. Differs from the White Cory in having considerably larger ears, and in that they are twelve-rowed. Ripens nearly as early and is thought by some to be of better quality. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts., 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

GOLDEN BANTAM. Surpasses in sweetness all others, remains in good condition longer, retains its rich flavor, sweetness and tenderness to maturity. Ears 5 to 7 inches long, eight-rowed; kernels broad, golden yellow. Stalks about 4 feet high, sturdy and productive. $\frac{1}{2}$ pt. 10 cts., pt. 18 cts., qt. 30 cts., 2 qts. 50 cts., $\frac{1}{2}$ pk. 85 cts., pk. \$1.40, bus. \$5.

QUINCY MARKET. One of the sweetest early varieties. The ears closely resemble the Crosby, but are larger and mature earlier. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

EARLY CROSBY. New England Strain. This has been for years the most, popular second-early strain in New England, and is largely grown elsewhere. Ears are intermediate in size between those of the first-early sorts and the Kendel's Early Giant, especially attractive and distinct, having rather small, almost square kernels packed so closely on the cob, that there is no space between the rows, as with other varieties; has always twelve or more rows and tip is completely covered. Not only an unusually attractive ear, but of a size preferred by many, and corn is superior quality. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

HOWLING MOB. This corn originated in Ohio and it became so popular it was given the above name. The endeavor of the originator of this corn, was to get as large an ear as possible, early in the season and of sweet flavor. This corn is of strong and vigorous growth, from $4\frac{1}{2}$ to 5 ft. high and has abundant foliage and generally produces two ears to each stalk. Ears measure 7 to 9 inches in length with 12 or 14 rows. The corn, is pearly white, usually covered with a heavy husk which extends well over the tip of the ears which affords a good protection from worms and birds. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., 4 qts. 75 cts., pk. \$1.25, bus. \$4.50.

KENDEL'S EARLY GIANT. A second-early variety, following closely the small-eared, early kinds, but having ears of sufficient size to warrant its use for main crop, usually twelve-rowed. Of good quality; productive. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

EARLY CHAMPION. Ready for use about the same time as Kendel's Early Giant. Ears as large or larger, ten or twelve-rowed; kernels deep, pure, white, sweet and tender. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

METROPOLITAN. A second-early sort, maturing closely to the preceding; rather distinct in growth, having especially strong stalks with numerous narrow, very dark green leaves. Ears 9 inches long, ten or twelve-rowed. Well filled with large, deep kernels of excellent quality. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

POTTER'S EXCELSIOR, or SQUANTUM. A popular midsummer variety. Ears of medium size, twelve-rowed, very sweet and tender. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

BLACK MEXICAN. A popular variety; until the introduction of the Golden Bantam, the sweetest of all. Ears of medium size, kernels large, when ripe, bluish black, but at proper stage for cooking, the color shows but little if at all. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

MARBLEHEAD MAMMOTH. Ears of the largest size, having twelve to sixteen rows of kernels of more than average size, sweet and tender. Preferred by some to Evergreen for fodder and matures its crop earlier. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

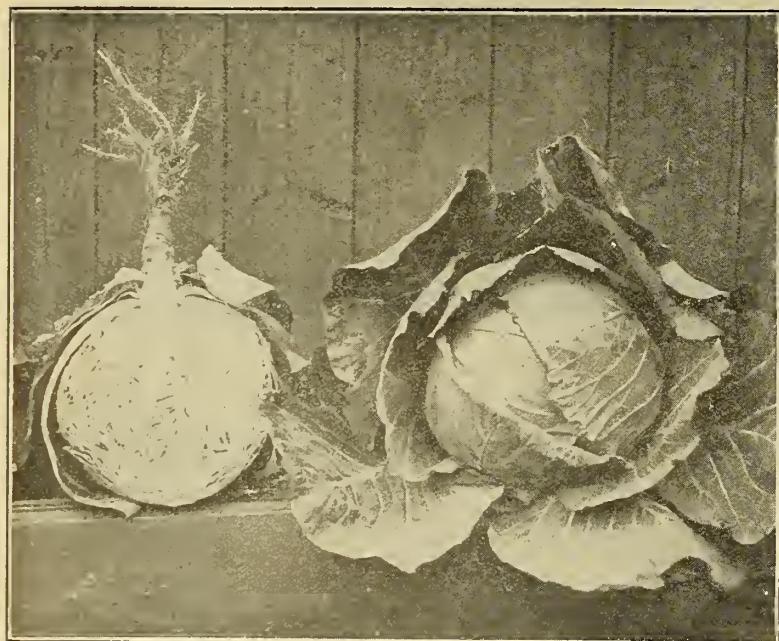
COUNTRY GENTLEMEN. Medium size, with irregular rows of very deep and slender kernels and small cob. Sweet and tender, not surpassed in quality by any other variety with white kernels. Plant very productive, often yielding three and sometimes four good ears. Plant liberally, as the kernels, being much shriveled, seldom germinate so well as those of the regular type. Ready for use a little before the Stowell's Evergreen. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

FERRY'S EARLY EVERGREEN. Ears large, with sixteen to twenty rows. Equal in quality to the Stowell's Evergreen; one or two weeks earlier. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.50.

STOWELL'S EVERGREEN. Standard late. Ears large, kernels shriveled; very deep. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 70 cts., pk. \$1.15, bus. \$4.

GOLDEN CREAM. This new sweet corn is of California origin and the result of crossing the Golden Bantam on the Country Gentlemen. It is entirely distinct, being of dwarf habit in growth, having an ear about the length of the Golden Bantam, and differs from the Country Gentlemen in time of maturity, being very early.

The combination of good qualities of the varieties which produced the Golden Cream insuring to a reasonable degree of certainty that the product would be of more than ordinary quality, its earliness and productiveness, should induce a trial of it by all who cultivate sweet corn. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 75 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.25.



COPENHAGEN MARKET

Ross Bros. Co.,
90 Front St., Worcester, Mass.

Gentlemen:—

I am pleased to report from the Copenhagen Market Cabbage seed purchased from you this past season, I raised on one acre of land 351 barrels of cabbage which brought in the Worcester market, less all commission, \$447.75. I will also add that the leaves from this crop I used as green fodder for 21 cows twice a day for 28 days, and I consider the value equal to the cost of growing the entire crop.

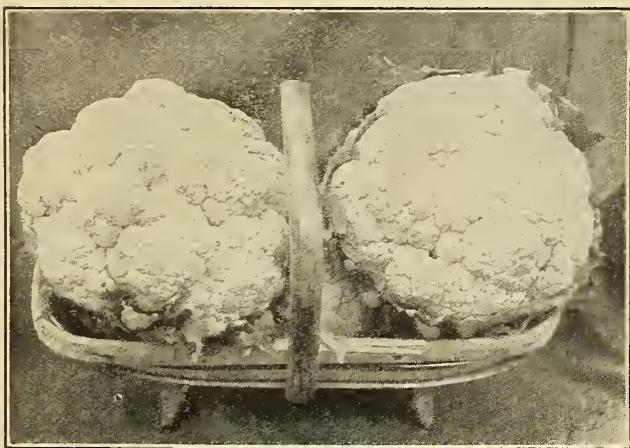
Yours very respectfully,
WILLIAM H. HASTINGS,
Boylston, Mass.

WARREN STONE MASON. An improved strain of the old Stone Mason. Previous to the introduction of the Danish Ballhead the most popular variety in New England for main crop. Earlier and more nearly round than the old strain, of medium size, hard, solid and of excellent quality. Reliable and keeps well. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

Danish Ballhead Cabbage

This is now the most popular main crop variety for market, due to its remarkable solidity, weight, uniformity in size, fine keeping qualities and attractive round head. It is especially valuable for shipping to distant markets and for late spring use. Though the heads are but of medium size, owing to their great weight the product of an acre exceeds in weight that of any other variety. We offer a strain of seed which has been proved by repeated trials to be unsurpassed. Pkt. 6cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50, postpaid.

NEW RED CABBAGE "DANISH STONEHEAD." This variety is the largest, hardest and most solid of all red varieties. It is of rich deep color, of fine round form, sure to head, and never cracks. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. 50 cts., 2 ozs. 90 cts., $\frac{1}{4}$ lb. \$1.50, postpaid.



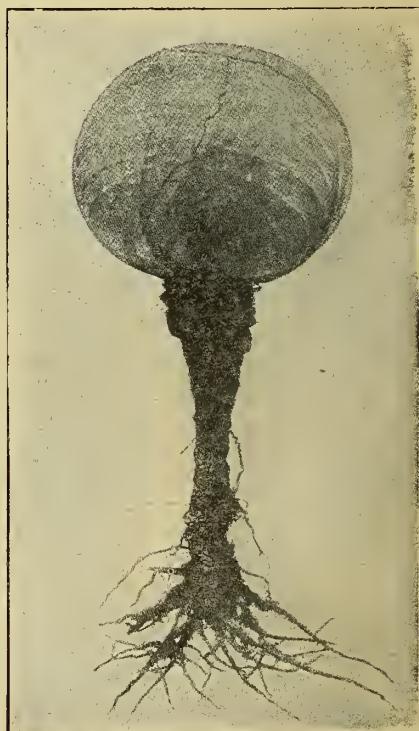
SNOWBALL CAULIFLOWER (SELECTED STOCK)

THE BEST EARLY CABBAGE "COPENHAGEN MARKET"

Perfectly Ball-shaped. Remarkably Uniform in Heading. As Uniform in Size as though the Heads were Cast in a Mold. Early, Large, Heavy. The Finest Round-headed Early Cabbage ever offered.

This remarkably new early cabbage, on the market but a few years, has already proven itself as being supreme to any other variety as an early cabbage for the market gardener. The letter which we print from W. H. Hastings, one of our largest market gardeners, is a proof of this statement. As early as the "Charleston Wakefield" it fully meets the requirements of earliness expected of an Extra Early variety, while the heads are as large, or larger, than the "Danish Ballhead," averaging in weight about ten pounds. The type is remarkably well-fixed, the heads perfectly ball-shaped, all maturing at the same time and so uniform in size that, as the representative of the Danish grower said, they appear as though they were all cast in one mold. The plant is short-stemmed, the heads being produced only a little above the ground. The light green rather small leaves are saucer-shaped and always tightly folded, permitting of closer planting than usual with other varieties, having a head of equal size. No other early variety will produce so great a weight per acre and we doubt if any of the later varieties will much surpass it in this respect.

The Copenhagen Market is, we believe, certain to prove a profitable investment to the market-gardener. Postpaid, pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts., 2 ozs. 75 cts., $\frac{1}{4}$ lb. \$1.25, lb. \$4.00. Per lb. postage extra.



DANISH BALLHEAD CABBAGE

Snowball Cauliflower

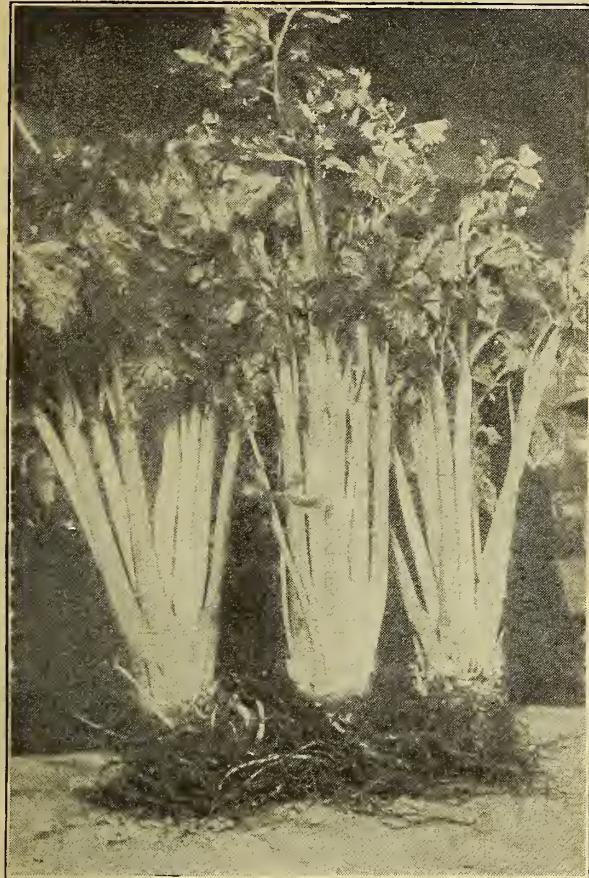
We offer this season, as usual, our selected stock of Snowball Cauliflower Seed. There is no better seed grown than that which we offer, whether for the market gardener or for the private place. Snowball Cauliflower is the best for home use or for the market. The snow-white, oval heads are one of the most attractive as well as one of the most delicious garden vegetables grown. Where it is possible it is well to sow Cauliflower Seed where the plants are to remain, but if it is necessary to transplant, care should be taken not to reset them too deep. Pkt. 20 cts., $\frac{1}{2}$ oz. 60 cts., $\frac{1}{2}$ oz. \$1.10, oz. \$2.00, $\frac{1}{4}$ lb. \$7.50, postpaid.

For other varieties, see page 34.

Our Scarlet Globe Radish

OUR SCARLET GLOBE RADISH is globular in form and is a handsome, rich, bright scarlet color, mild, crisp and tender, and one of our best selling radishes. It resists heat without becoming pithy, and is ready in twenty-five days. Should be used as a cold weather radish as it will lose its shape during hot summer weather.

Our Scarlet Globe Radish should be planted in every home garden as well as for market.
Pkt. 5 cts., oz 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., 1 lb. 75 cts., 5 lbs. or over 60 cts. per lb.



GIANT PASCAL CELERY

Giant Pascal

A well-known and popular greenleaved variety which developed from the Golden Self Blanching. Very solid and crisp, of the finest quality, stringless, tender, and of a peculiarly sweet nutty flavor. A good blancher and a first class winter keeper. Our stock of this variety is unsurpassed. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts., 2 ozs., 55 cts., $\frac{1}{4}$ lb. \$1.00.

Danvers Half Long Carrot

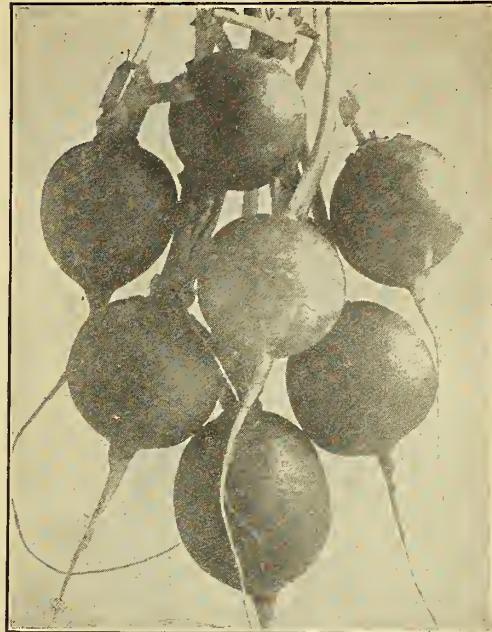
A well known rich orange red variety, very smooth and handsome, producing extra heavy crops. An excellent market variety; crisp, sweet and tender. Although the roots are short, they produce as large a bulk as the longer field sorts and are more easily harvested. This variety has yielded 25 tons per acre. We have given this our special attention and are able to offer at this time as good strain of seed as is possible to obtain. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

BOOKS

VEGETABLE GARDENING. By Prof. Samuel B. Green, a prominent authority on the growing of vegetables for home use and the market. Treats on tillage, implements, seed-growing, greenhouses, insects and how to destroy them; complete classification of vegetables with instructions for growing. A complete, practical guide to gardeners. 256 pages. Illustrated. Paper, 50 cts., cloth, \$1.00.

FARMER'S CYCLOPEDIA OF AGRICULTURE. By Wilcox & Smith. Agricultural science and practice on farm, orchard and garden, feeding and diseases of farm animals. \$3.50

ANIMAL BREEDING Shaw

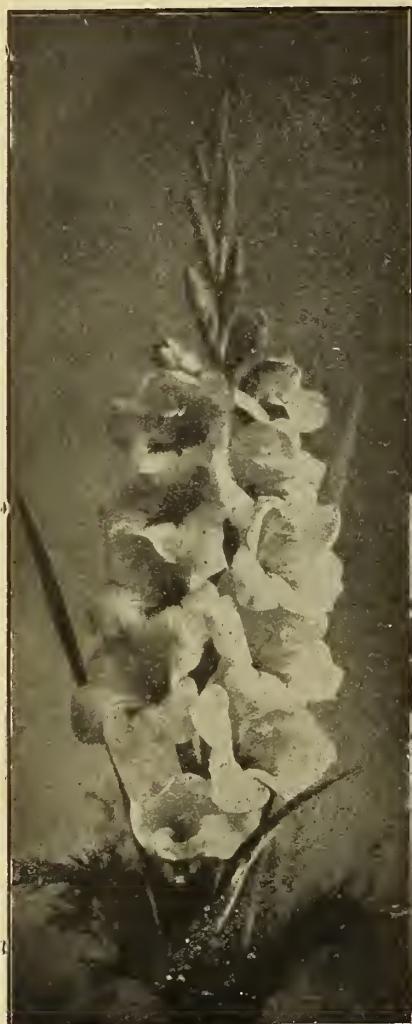


SCARLET GLOBE

SOILS. Burkelt, Their Proprieties, Improvement, Management, Crop Growing and Feeding.....\$1.25



DANVERS CARROT



SNOWBANK

"KUNDERDI GLORY"

A New Type of Gladiolus with Ruffled Petals.

This is very distinctly a new type, each petal being beautifully ruffled and fluted, a feature especially noticeable in orchids and which gives to the Glory a refined and delicate beauty quite beyond the most beautiful of the best of the older types. The broadly expanded flowers are borne in pairs, all facing one way, on straight, strong stalks fully $3\frac{1}{2}$ feet in height. From three to six, and sometimes eight flowers are open at one time. The color is a delicate cream pink with a most attractive crimson stripe in the center of the lower petals. Each 10 cts., doz. \$1.00, 100, \$7.50.

SCHWABEN

A variety of extreme vigor, many of the bulbs producing two or three flowering stalks which very often produce side branches besides. The stalk produces about 20 very large flowers, 6 to 8 usually open at one time. The color is the best of clear Canary yellow, shading to a soft sulphur yellow when opening. The center of the flower is a deep golden yellow with brownish carmine blotches. The foliage is very distinct, being broad, strong and of a rich green color.

Certificate of merit in Paris, 1910. Each 15 cts., doz. \$1.50, 100, \$10.00.

KLONDIKE

A lovely variety; pale yellow, with large blotch of vivid crimson-maroon in the throat. Of medium size and form, somewhat similar to the Lemoine type, but more open. The spike though rather slender, is wiry and straight; the foliage strong and healthy. Each 6 cts., doz. 60 cts., 100 \$4.00.

NIAGARA

In type the variety resembles "America," but the flowers appear to be somewhat larger, measuring $4\frac{1}{2}$ inches across. In color the flowers are a delightful cream shade with the two lower petals or segments blending to canary yellow. The throat is splashed with carmine, and the lower ends of the outside petals are also blushed with carmine. Destined to lead in the cream colored varieties. Each 10 cts., doz. \$1.00, 100 \$7.00.

GLADIOLUS

In diversity, beauty and magnificence, no other flower which can be so easily grown and with which success is so nearly certain, can at all compare with the Gladiolus. The range of colorings and markings is practically unlimited, and especially since the introduction of the thousands of new seedlings, may the claim be made that the varieties are numberless.

As a cut flower for vases, within the scope of the amateur no other flower equals the Gladiolus in striking and effective appearance. And in lasting quality but few, if any, compare. If the spikes are cut when only the lower flowers are open they will last for a week, the upper buds opening when kept in fresh water as well or better than when left to open out doors.

Culture — Plant in full exposure to the sun. A light, moist soil one year from sod is the most desirable, but the Gladiolus thrives well in nearly all soils, the exception being a stiff, clayey one. While soil should be well enriched, avoid using fresh manure; use only that which is well rotted. Much the better way is to use land that was well manured the previous year, using none at the time of planting, but giving afterward one or two applications of commercial fertilizer. If possible avoid planting in the same place for three years.

If space is limited, bulbs may be planted in double rows, four inches between the rows and two inches apart in the row; they are, however, more generally planted in single rows about one foot apart, two, three or four inches deep, according to size. The first planting may be made by the middle of April, and successive ones till the first of June, but for late planting bulbs should be reserved.

Before the ground freezes dig up the bulbs, cut off the stalks closely and store in a cool, dry place. The old bulbs may be removed a few weeks later when convenient.

The Gladiolus bulbs which we offer are largely grown by us. Bear in mind, however, that by the term "first size" we do not mean that all are of equal size, as many of the choice varieties never produce large bulbs. Six sent at dozen rate; 50 at 100 rate; 250 at 1,000 rate. Postpaid at single prices.

MRS. FRANK PENDLETON

One of the most exquisitely colored and formed Gladiolus in our entire list. In addition, the size of bloom is not exceeded by any other. The color is a delicately flushed salmon pink, the color extending to the reverse side of the petal, as well as in the center. The blooms are wide open and are arranged individually on the very slender but wiry stems. Each flower is doubly enhanced by a rich maroon blotch on the three lower petals. Each 20 cts., doz. \$2.00, 100 \$15.00.

PANAMA

A new seedling of "America" which resembles the parent variety in every way except that it is a much deeper pink. A grand variety which evokes words of praise wherever exhibited. Awarded First-class Certificate by Newport Hort. Society, September 16th, 1911. Spike very long with flowers large and well arranged. Each 20 cts., doz. \$2.00, 100 \$15.00.

PEACE

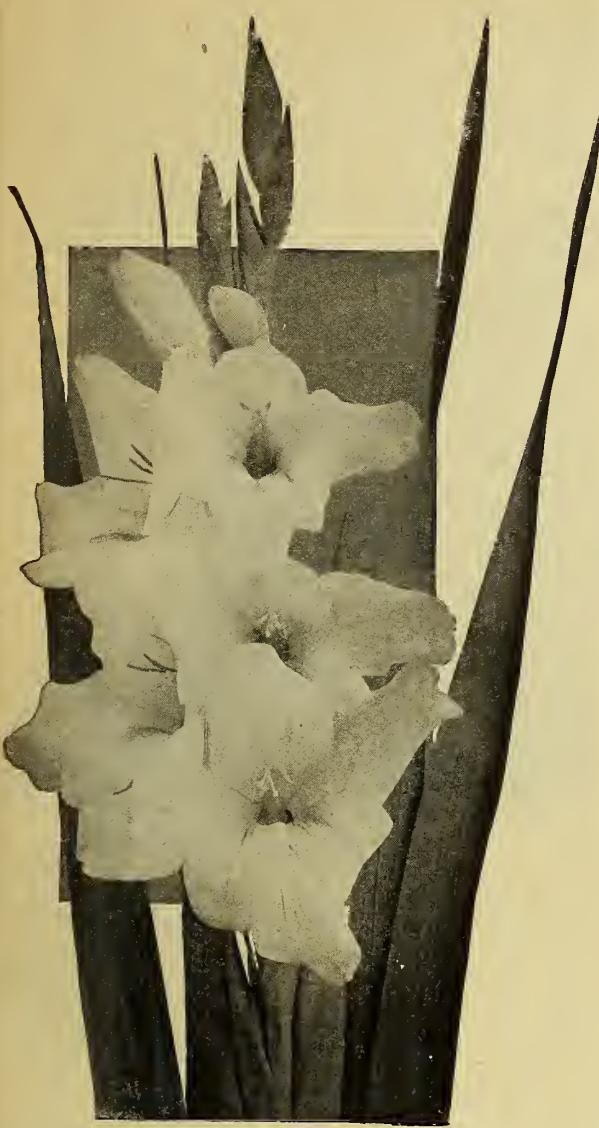
The flowers are a beautiful white, the inside of the petals feathered pale lilac; it is not an early bloomer, but if planted with other varieties will flower about the time they are finished. Each 15 cts., doz. \$1.50, 100 \$10.00.

CHILD'S Or, Giant Flowered Gladioli

A very large-flowering class of unusually vigorous growth and luxuriant foliage. The spikes are very long and thick, strong and straight. The flowers are of fine form and great substance. The range of coloring is good with the exception of a lack of white and light varieties, and the smoky shades admired by some are more prevalent in this class than in any other, while many varieties are flaked in a manner peculiar to this class. Doz. 35 cts., 100 \$2.10, 1,000 \$15.00; second size, doz. 20 cts., 100 \$1.20, 1,000 \$7.00.

GROFF'S SILVER TROPHY STRAIN

A mixture of sections 1, 2 and 3 of Groff's Silver Trophy in well balanced proportions including Red, Scarlet, Crimson, White, Yellow, Blues and many other light shades. Each 5 cts., doz. 50 cts., 100 \$3.00.



PEACE

MRS. FRANCIS KING. A new variety which excited great comment and admiration, both for size of flower and beauty; the color of the flower is a light scarlet; the flowers are very large, usually measuring from $3\frac{1}{2}$ to 4 inches in diameter. Each 6 cts., doz. 60 cts., 100 \$4.50.

PINK BEAUTY. Bright carmine rose with darker blotch on lower petals, early. Each 5 cts., doz. 50 cts., 100 \$3.00.

PRINCEPS. Of immense size, dazzling scarlet with white blotch on lower petals. Spike $3\frac{1}{2}$ to 4 feet high, stout and always straight. Each 5 cts., doz. 50 cts., 100 \$3.00.

WILLY WIGMAN. (First-class certificate.) Creamy white, scarlet blotched, extra large bloom. Each 15 cts., doz. \$1.50, 100 \$10.00.

WHITE SANDISONI or SNOWBANK. Pure white, except slight stain of carmine at base of petals. Flowers of medium size. A lovely variety. Each 6 cts., doz. 50 cts., 100 \$3.00.

BURBANK'S SEEDLINGS Mixed

This is a wonderful collection of new varieties produced by Mr. Luther Burbank from seed. This mixture came to us direct from him and we have grown these carefully until at this time we have a sufficient quantity to offer to our trade. In this mixture will be found many new colors and shades including many with varied markings. Flowers are all of immense size. We feel satisfied that we have never before offered a mixture to compare with them. Each 10 cts., doz. \$1.00, 100 \$7.50.

AMERICA. One of the best Gladiolus in existence. The color is a most beautiful soft pink, very much like the "Enchantress" Carnation. Individual flowers are very large and massive, and as a group or in vases there is no other flower which can excel it in effectiveness. Each 5 cts., doz. 50 cts., 100 \$3.00.

ATTRACTION. Deep, dark rich crimson, with a very conspicuous charge pure white center and throat. At once a most beautiful and attractive sort. Each 6 cts., doz. 60 cts., 100 \$4.50.

AUGUSTA. Flowers are of perfect paper white with a slight pink shade on lower half of the petal. The spike is set solid and perfect with the flowers from top to bottom. Each 5 cts., doz. 50 cts., 100 \$3.00.

BARON HULOT. Good sized flower, well arranged on straight spikes; color dark violet bordering on blue. Each 5 cts., doz. 50 cts., 100 \$3.00.

BRENCHLEYENSIS. This is an old standard sort, and one of the best for bedding where one shade of good scarlet is desired. Large bulbs. Each 5 cts., doz. 35 cts., 100 \$2.50.

ELECTRA. Bright scarlet shaded rich rosy pink, light cream band, excellent. Each 15 cts., doz. \$1.50, 100 \$10.00.

EMPEROR OF INDIA. Deep velvety maroon, the darkest Gladiolus. A very handsome flower. Each 6 cts., doz. 60 cts., 100 \$4.50.

EUROPA. The finest pure white Gladiolus. This new variety is of perfect form, produced on strong stiff, tall spikes, usually bearing from 20 to 25 pure white blooms. The flowers open very rapidly and it is not uncommon to have from ten to twelve of these open at the same time; the formation is very close and compact, making a perfect spike from the time when the first bud opens until the last. Each 20 cts., doz. \$2.00, 100 \$15.00.

GIANT PINK. Large flower, dark pink shade with brilliant throat marking of dark red; tall, strong grower; flowers well arranged, with many open at the same time. Each 5 cts., doz. 50 cts., 100 \$3.00.

GLORY OF HOLLAND. Very fine white, tinted rose. Each 6 cts., doz. 60 cts., 100 \$4.50.

HALLEY. Delicate salmon pink predominates with a slight rosy tinge, lower petals have a creamy blotch with a bright red stripe in center. Each 5 cts., doz. 50 cts., 100 \$3.00.

HOLLANDIA. A new variety, which surpasses most others in length of spike and bearing an unusual number of well-arranged flowers, many of which are open at once. A lovely pink shade, tinted yellow. Each 5 cts., doz. 50 cts., 100 \$3.00.

LILY LEHMAN. White, rose tinted. An elegant flower. Each 6 cts., doz. 60 cts., 100 \$4.50.

WORCESTER MIXED

A mixture of our own preparation comprising many named varieties, selections from all classes, unsurpassed in diversity of both colors and types and in quality of flowers. Includes a good proportion of white and light shades and well balanced generally in proportion of colors. We consider this mixture the best value we offer. 25, 75 cts., 100 \$2.75, 1,000 \$20.00; second size, 25, 50 cts., 100 \$1.50, 1,000 \$9.00.

CHOICE MIXED

A mixture containing a good proportion of white and light varieties and well balanced generally. It has been our purpose to make the Choice Mixed as much like the Worcester as possible for the price, and as with that, our work has been one of constant improvement; it is of greater value now than ever before. 25, 50 cts., 100 \$1.85, 1,000 \$12.00.

Decorative Dahlias

15 cts. each, \$1.50 per doz., unless otherwise noted

This class includes all large, loose-flowering varieties which do not properly belong to the Cactus class. They are of very free-blooming habit and flowers are usually of the largest size.

BLACK PRINCE. Very dark maroon, nearly black.

JACK ROSE. Brilliant crimson-red, similar in shade to the well-known "Jack" rose. One of the best for cutting. Each 25 cts., doz. \$2.50.

JEANNE CHARMET. A pleasing shade of violet-rose on a lighter ground. A splendid flower for cutting. Each 20 cts., doz. \$2.00.

OBAN. Rosy lavender suffused silvery fawn. A fine large flower and plant blooms profusely.

MME. VAN DEN DAEL. Finest soft pink, very large. Each 25 cts., doz. \$2.50.

PEARL DE LA TETE D'OR. Pure white, often having a light purple tinge, notched petals, fine and free, best white decorative, good for Florists' use.

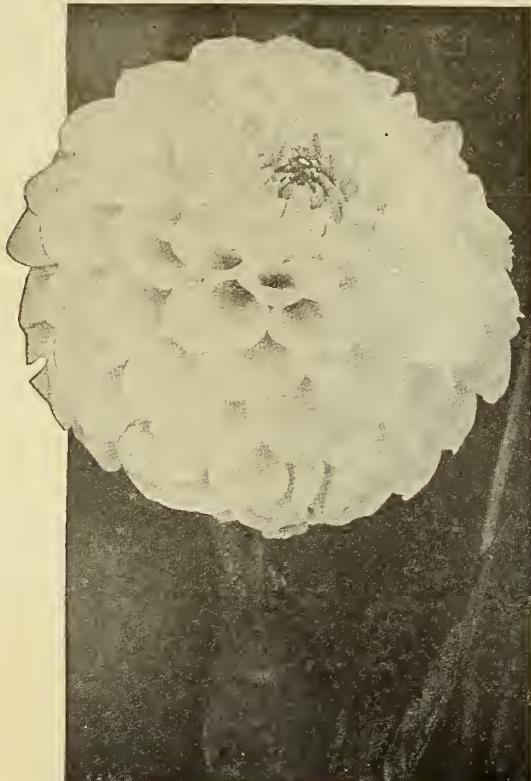
MINOS. Rich velvety maroon.

GRAND DUKE ALEXIS. White, very faintly tinged with rosy lavender, petals quilled. Each 20 cts., doz. \$2.00.

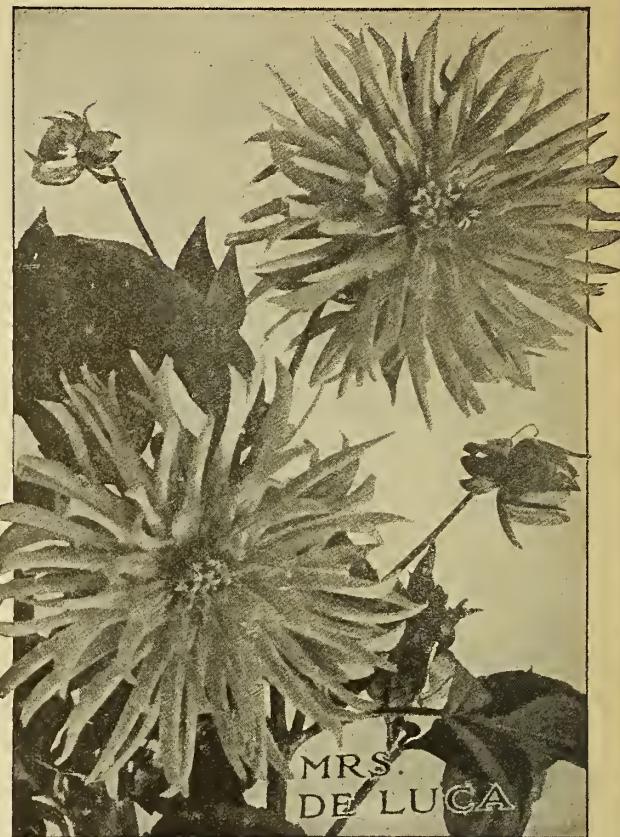
SOUVENIR DE GUSTAVE DOUZON. Orange-red, of giant size, blooms freely.

YELLOW COLOSSE. Gigantic flowers of pure primrose-yellow, best yellow decorative to date. Each 25 cts., doz. \$2.50.

W. W. RAWSON. The popularity which this novelty has acquired in this short time speaks in itself for the superior feature of this flower. The petals towards the center are quilled similar to the Grand Duke Alexis, toward the outer part they are more open and flat. The color is pure white, overlaid with amethyst-blue. This wonderful combination gives it the appearance of a delicate lavender. The flowers measure from seven to nine inches in diameter.



W. W. RAWSON



(See page 23 for description)

Pompon, or Bouquet Dahlias

12 cts. each, \$1.25 per doz.

Small-flowered varieties; the best of all for cutting, blooming more freely and usually having extra-long stems. The flowers are of the same form as the Show Dahlia.

Ariel. Orange-buff.

Alewine. Delicate pink, tinted lilac.

Catherine. Bright yellow.

Darkness. Dark maroon.

Fairy Queen. Sulphur edged pink, very free.

Fashion. Bright Orange.

Little Bessie. Creamy white.

Pure Love. Lilac.

Prince Charming. Cream, tipped purple.

Snowclad. Small, white, free.

Vivid. Bright scarlet.

Mixed Dahlias

Postpaid, 90 cts. per doz.; by express, 80 cts. per doz., \$1.50 for 25, \$5.00 per 100.

These include some of our best varieties, those of which labels have been lost, and at times, varieties of which we have a surplus. While all classes are usually included, we give no guarantee that any lot sent out will include all, nor should it be understood that the customer is privileged to order those of any one class. We shall, however, endeavor to send a good assortment of colors, and are sure the mixture will be found very satisfactory.

We do not pay postage on quantities above one-quarter pound. See Parcel Post rates inside Front Cover.

PEONY-FLOWERED DAHLIAS

Never before has a new type of flower been received with so much popular acclaim as has been accorded the Peony-flowered Dahlia. This new type was originated only eight years ago in Holland and is today the Dahlia of the future because of its grace and beauty, remarkable freedom to flower and length of stems, all of which combine to make it an ideal garden variety.

GERMANIA. Wine color, dark velvety crimson shaded with yellow; long, straight stems; height 4 feet. 25 cts. each.

J. W. JANSEN. Rosy salmon with a shade of yellow; an elegant flower borne on stout erect stems never less than 2 feet in length; a rich and pleasing shade. 25 cts. each.

LA RIANTE. The finest sort for mass effect or hedges; plants grow 3½ feet high and their flowers are borne on enormously long stems in clusters from 2 to 4, far away from the foliage; color a deep pink. 25 cts. each.

PRISCILLA. A seedling from the well-known dahlia "Souvenir de Gustave Douzon." Color, a light orange-scarlet. 25 cts. each.

QUEEN EMMA. Soft lavender pink; of refined form and good keeper. 25 cts. each.

QUEEN WILHELMINA. The most satisfactory pure white flower; the petals are elegantly twisted and are of glistening white; the plant is extremely free blooming and makes a splendid companion for "La Riant" as a hedge plant. 25 cts. each, \$2.50 per doz.

DAHLIAS

A Selection of Choice Varieties. The Best of the New Kinds that are Good.

All Dahlias are sent postpaid at prices quoted. If desired by express, 10 cts. may be deducted from dozen price.

Show and Fancy Dahlias

15 cts. each, \$1.50 per doz. except where otherwise noted.

SHOW DAHLIAS include all large close-flowering varieties of a single color, and those in which the ground color is of a lighter shade than the edges or tips.

FANCY DAHLIAS include all striped, large, close-flowering varieties and those in which the ground color is darker than the edges. These varieties are, however, somewhat variable and often show but a single color.

ACQUISITION. Deep rich shade of lilac, with large flower on long stems.

A. D. LIVONI. Clear shell-pink, of perfect form, medium size, very profuse. An old variety, but still very popular.

DR. KIRKLAND, or CUBAN GIANT. Dark crimson, of fine form and largest size. Each 20 cts., doz. \$2.00.

GOLDEN AGE. Pure sulphur yellow.

IMPERIAL. Deep purplish maroon.

LUCY FAWCETT. Pale yellow, striped pink.

MERLIN. Bright orange-scarlet, finest scarlet to date, very free.

METEOR. Bright red, very large.

NUGGET. Orange, heavily tipped scarlet, very large, free and showy.

QUEEN VICTORIA or MARY D. HALLOCK. Canary yellow, very fine.

ROBERT BROOMFIELD. Pure white, large flower, very free.

STORM KING. Pure white; of medium size, but blooms profusely; very desirable.

Cactus Dahlias Choice Standard Varieties.

This class is of comparatively recent introduction, and is entirely distinct from any other class. The flowers are loosely and artistically formed, and very irregular, resembling the Chrysanthemum. Petals long, twisted, and terminating in a point. Some varieties possess nearly straight petals, others are gracefully incurved.

Except where otherwise noted, 15 cts. each, \$1.50 per doz.

ALIGHT. Rich deep orange-scarlet, very large, free.

BORNEMANN'S LIEBLING. Delicate soft rose-pink.



PEONY FLOWERED DAHLIA

CAPSTAIN. Soft red, tinted apricot, free and perfect.

CLARA G. STEDWICK. Clear bright salmon, large and very free.

COUNTESS OF LONSDALE. A pleasing blending of salmon-pink and amber; of finest form, flowers profusely under all conditions and is perhaps the most desirable of all Cactus varieties.

CREPUSCULE. Pale orange-yellow, the outer petals deepening to deep amber-buff, refined flower of beautiful shape; large, early and very free blooming; excellent for exhibition. Price 25 cts.

EARL OF PEMBROKE. Bright plum, profuse.

EUREKA. Rich deep purple, fine and free, one of the best.

FLORADORA. Bright blood-red, remarkably free blooming. Each 25 cts., doz. \$2.50.

FORBES ROBERTSON. Light orange.

F. H. CHAPMAN. A deep orange-yellow, of extra fine form, large.

FRED COBBOLD. Bright crimson, large and free, gorgeous.

GEN BUTLER. Rich velvety crimson, tipped white, attractive.

GENISTA. Deep amber, shaded gold, one of the most effective.

ICEBERG. Ivory white, petals long and narrow, good. Each 25 cts., doz. \$2.50.

J. H. JACKSON. The best dark dahlia to date, almost black.

KING EDWARD VII. Bright cherry red; fine, blooms freely.

KREMHILDE. Soft pink, center nearly white. Popular with florists.

LADY C. CAMPBELL. Yellow at base, tipped orange.

LADY FAIR. Primrose tinted soft pink, very novel type.

MADAME DE LUCCA. Golden yellow, shaded orange at tips. Each 25 cts., doz. \$2.50.

MARY SERVICE. Pinkish apricot, or heliotrop; very free flowering.

MRS. GEO. CASELTON. Blackish maroon, one of the best.

MRS. MURRAY IND. Bright rose, very large.

OCTOPUS. Nearly white, slightly tinged lavender.

PRINCE OF ORANGE. Rich deep orange, with yellow center.

PRINCE OF YELLOWS. One of the best yellows for cutting.

STANDARD BEARER. Ficry, scarlet, free.

Best Quality Cannas

Good strong plants in pots, and dormant bulbs. The following is a list of fifteen of the best varieties. Dormant roots until April 15th only.



All at the uniform price, dormant roots, dozen postpaid 50 cts., by express, doz. 40 cts. Good, strong plants in 4-inch pots, doz. \$1.00; 100, \$7.50. Not less than 3 plants of any variety at doz. price.

KING HUMBERT. Truly a king among the cannas, its majestic growth is doubly enhanced by a massive coppery scarlet flower and the broad deep bronze foliage. It grows 4 feet high and is splendid as a center, edged with a dwarf yellow canna.

EGANDALE. Bright cherry red; bronze leaved and one of the best of this variety.

WYOMING. Might be called King of the Giants, for it is one of the most majestic, with the double attraction of having a luxuriant growth of rich purple foliage. Above this are borne great plumes of massive orange-colored blossoms, true orchid-shaped with large rounded petals.

ALPHONSE BOUVIER. Brilliant crimson, deeper when fully open. 6 feet.

ALSACE. Delicate sulphur-yellow, changing soon to creamy white. 4½ feet.

AUSTRIA. A fine variety of the orchid-flowered or Italian type. Canary-yellow; large, handsome foliage. 5½ feet.

BRANDYWINE. Foliage luxuriant and of the darkest hue. Flowers large, intense wine-red, beautifully mottled with deep crimson; two or three petals sometimes narrowly edged with bright gold. 4 to 5 feet.

CHAS. HENDERSON. Deep but brilliant crimson. 4 feet.

FLORENCE VAUGHAN. Yellow, spotted with red. One of the best. 4 feet.

ITALIA. Orchid-like flower; center brilliant red; wide, irregular margin of yellow. 5 feet.

LOUISIANA. Strong, vigorous grower; attains a height of 7 feet; producing a dense mass of glossy green foliage and large, vivid scarlet flowers.

MADAME CROZY. A very popular variety. Crimson-scarlet, bordered with yellow; foliage broad and massive. Often blooms when a foot high, 4 feet.

Mrs. Kate Gray. A grand variety of the orchid-flowered type; flowers of immense size; orange-scarlet, flaked with yellow. 6 feet.

PREMIER. Deep crimson-red, bordered with yellow. 3 feet.

QUEEN CHARLOTTE. Bright orange-scarlet, wide edge of golden yellow.

MUSAFOLIA. This is one of the finest foliated cannas, with enormous musa-like leaves, of a dark green, bronze-tinged color, the edges of the leaves beautifully banded with bronze-purple.

ROBUSTA. A popular dark-leaved variety. 7 to 8 feet.

SHENANDOAH. A splendid red or bronzed-leaved sort, beautifully veined and tinted, and bears fine large trusses of salmon-pink flowers. Blooms early and abundantly. 6 feet.

Begonias, Tuberous-Rooted These are, perhaps, all low-growing bedding plants, and are not, as commonly thought, of difficult growth. They require a rich, mellow soil, shaded from the direct rays of the sun during the hottest part of the day. Tubers should be started early in the house and plants set in the open ground about June 1. They will bloom soon and profusely and continuously until frost.
SINGLE VARIETIES. White, Pink or Rose, Red, and Yellow. Each 6 cts., doz. 60 cts.

DOUBLE VARIETIES. Same colors. Each 10 cts., doz. \$1.00, postpaid.

Madeira Vine A rapid-growing climber with beautiful, thick, glossy wax-like leaves and bearing profusely in graceful feathery racemes, white flowers which have a fragrance resembling mignonette. Plant when ground becomes warm. Store tubers in a cold, dry place during winter. Postpaid, 5 cts. each, 50 cts. per doz.

Montbretia Hardy border plants with elegant and gracefully branched gladiolus-like flowers which are now much prized for cutting during summer. The colors vary from clear yellow to rich scarlet, and the plants grow about 2 feet in height. Plant the bulbs five inches deep and protect them during the winter with liberal mulching.
Crocos mae flora. Orange scarlet. *Etoile de Feu.* Rich scarlet, yellow center. *California.* Deep yellow, very large. *Geo. Davison.* Pale Orange Yellow. *Fire King.* Bright red. All at uniform price. 3 for 10 cts., doz. 30 cts., 100 \$2.00, postpaid.
Germania. Orange Scarlet. Very large.

Caladium Esculentum. Elephant's Ear

A very large-leaved tropical plant of rapid growth. In warm, rich, moist soil, large bulbs will send up several stalks about 5 feet high, with leaves 2½ to 3 feet long and about 20 inches wide. Very ornamental, planted either single or in groups.

MAMMOTH BULBS. 25 cts. each, 65 cts. for 3, \$2.40 per doz.

LARGE BULBS. 15 cts. each, 40 cts. for 3, \$1.40 per doz.

If desired by mail, add for postage 15 cts. and 10 cts. each, according to size.

Asters of Special Merit

VICK'S PINK ENCHANTRESS

is upright in habit, as distinguished from the branching form. The plant is very vigorous and produces long, strong, graceful stems for the support of numerous large marketable blooms. The flower is always full double; petals are of medium length and very broad. Those towards the center fold in very regularly while gradually, towards the outer edge, the petals stand out more and more until those on the outside recede from the center thus increasing the diameter of the flower, which compares very favorably in size with the largest flowering kinds on our farm.

Per packet 20 cts., two for 35 cts.

FAMOUS KING ASTERS

The plants are very tall and crowned with massive flowers quite unlike any other type in cultivation. The petals are very long and narrow, nearly straight and almost flat, being only slightly folded lengthwise. The thick masses of narrow petals give the flowers a beautifully soft, fluffy appearance, and their immense size and peculiar form make them strikingly handsome and distinct.

White (branching type). Pkt. 25 cts., 2 pkts. 40 cts.

Crimson (upright type). Pkt. 25 cts., 2 pkts. 40 cts.

Pink (upright type). Pkt. 20 cts., 2 pkts. 35 cts.

AMERICAN BRANCHING

A superior late-blooming strain of American origin. The flowers are of the largest size, borne on long, graceful stems, often 15 or more inches in length, are exceedingly beautiful and unsurpassed for cutting. The plants are of extra-large and strong growth, and bloom profusely. 2½ ft.

108 WHITE. 109 PINK. 110 LAVENDER. 111 CRIMSON. 112 PURPLE. Each, pkt. 10 cts., ¼ oz. 35 cts., ½ oz. 60 cts., oz. \$2.

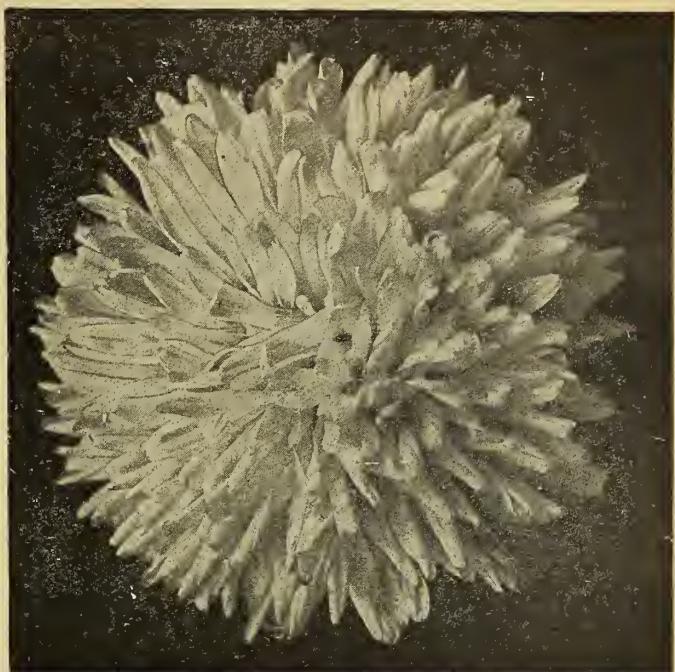
116 MIXED COLORS. Pkt. 10 cts., ½ oz. 30 cts., ¼ oz. 50 cts., oz. \$1.75.

A Beautiful Novelty, "Rainbow Corn"

A new and unique plant from Luther Burbank, who says of it: "Beautiful as the most beautiful dracaenas. Broad stripes of crimson, yellow, white, green, rose and bronze. Pkt. 10 cts."



NEW CRIMSON RAY COSMOS



VICK'S PINK ENCHANTRESS

Ross's Selected Giant Mixed Pansies

Everyone admires The Pansy for its simple beauty and because it is one of the earliest spring flowers. This is an unsurpassed strain, of immense size, has a good variety of colors and is equally good for forcing or for growing out of doors. Pkt. 50 cts., 1-16 oz. \$1, 1-8 oz. \$1.75, ¼ oz. \$3.00, ½ oz. \$5. oz. \$10.

Cosmos, "Crimson Ray"

A Beautiful New Type

This distinct novelty originated from one plant which attracted marked attention from the fact that the flowers, while equally as large in diameter, showed a new departure in form, number and shape of the petals. The petals were narrow and fluted, separated in star-like form and of the most brilliant crimson color overlaid with velvet sheen. Pkt. 10 cts.

Cosmos, Large Early-Flowering

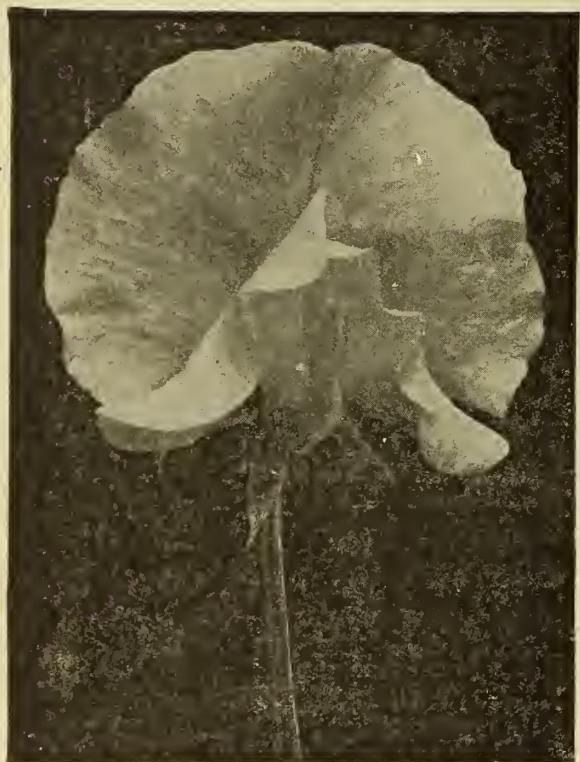
One objection to a more general use of the Mammoth Cosmos is that it is so late in coming into bloom the season is very short, and while this objection cannot be made to the Early-Flowering strain which has been offered for several years, the flowers are quite small. But in the New Large Early-Flowering we have a strain which combines the desired features of good size and early production. The flowers are fully twice as large as the older Early-Flowering while the plant blooms as early. Crimson, Rose, and White Mixed. Pkt. 10 cts.

FLOWER BOOKS

PROPAGATION OF PLANTS. Crossing species and varieties, how plants are multiplied, by Fuller.....	\$1.50
HOW CROPS GROW. Johnson. Chemical composition structure and life of plants	1.50
BULBS AND TUBEROUS-ROOTED PLANTS. C. L. Allen	1.50
PRACTICAL FLORICULTURE. Peter Henderson	1.50
GREENHOUSE CONSTRUCTION. L. R. Taft	1.50
GREENHOUSE MANAGEMENT. L. R. Taft.....	1.50
HOME FLORICULTURE. Ebene E. Rexford.....	1.00
PARSONS ON THE ROSE. Samuel R. Parsons.....	1.00
GARDEN INSECTS frequently destroy large percentages of a year's crop and oftentimes totally ruin certain patches. Professor Green has made a very thorough study of these pests and their habits, and gives many valuable remedies in his book, "Vegetable Gardening," which we will send, post-paid, anywhere for 50 cents. 256 pages.	

Sweet Peas

THE SPENCER WAVED OR GIANT ORCHID-FLOWERED SWEET PEAS



KING WHITE

MARGARET ATLEE

Margaret Atlee is a rosy salmon-pink on a creamy buff ground; a rich, soft color, and extremely attractive. The standard is large and wavy and inclined to double under favorable conditions. The wings are equally large, wavy and well set. It runs almost uniformly four blossoms to the stem; well poised and graceful. Margaret Atlee was introduced in 1912 but owing to short seed crops has not been offered generally until the past season.

Pkt. 10 cts., oz. 35 cts.,
 $\frac{1}{4}$ lb. \$1.25 postpaid.

SWEET PEAS

Giant Spencer Flowering Mixture

In offering our Spencer Mixture of sweet peas, we are without doubt, giving the public the choicest assortment of varieties obtainable. Great pains has been taken in selecting the best and largest flowering strains of all the true Spencer and Unwin types. Also to secure the best results great care has been given to the blending of colors. The Spencer or Waved varieties in this mixture will produce three or four flowers on a stem and the blooms are far superior to the old standard sorts. The blooms of some of the Spencers have been grown to over two inches in width on stems that have attained a length of over twenty-four inches. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 40 cts., 1 lb. \$1.40 postpaid.

KING WHITE

This is without doubt the grandest of all the White Sweet Peas and of true Spencer form. The stems are long and stout and bear almost always four blossoms. It has been planted in thousands of gardens and has now admiration wherever seen. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1.25 postpaid.

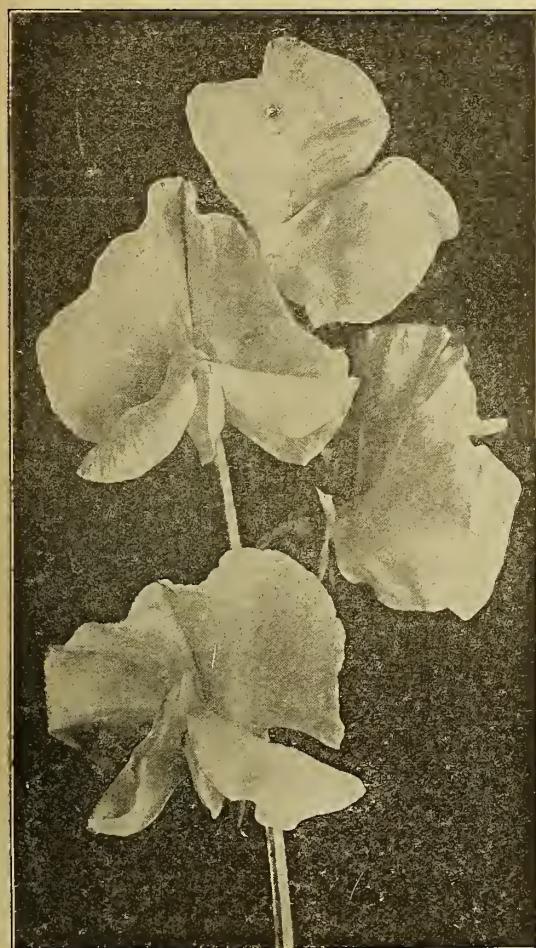


MARGARET ATLEE

The Spencer Waved or Giant Orchid-Flowered SWEET PEAS

All at uniform price. Pkt. 10 cents, $\frac{1}{2}$ oz. 15 cents, oz. 25 cents, $\frac{1}{2}$ lb. 90 cents, postpaid.

Sweet Peas succeed best when planted very early in the spring. The soil should be at least of medium fertility and well prepared. Sow thickly in drills about 5 inches deep, but cover with but 2 inches of soil, filling the drill when plants are a few inches high. Seed may be sown in either single or double rows, the latter being preferable because more economical of space, and requiring only half as much material for support of the vines. For this purpose, poultry netting is often used, but brush is better. The season of blooming will be prolonged if all flowers are cut and seed-pods not allowed to form.



DOBBIE'S CREAM

AMERICA SPENCER. White, covered with splashes and stripes of bright carmine.

APPLE-BLOSSOM SPENCER. Similar to the Apple Blossom of the older type; petals waved and crinkled; standard finely waved at edges; large and long-stemmed.

ASTA OHN. Large flowers, waved and fluted in the standard, with very large wavy wings, lavender, suffused or tinted with mauve; superior to any other lavender.

AURORA SPENCER. Enormous flowers, both wings and standard much waved or fluted; ground creamy white, beautifully flaked and mottled, rich orange-salmon.

BEATRICE SPENCER. Buff, pink, and rose with deeper rose wings.

BLACK KNIGHT. Rich deep maroon, large.

BLANCHE FERRY SPENCER. Closely resembles the variety of the older type. Large, well waved and crinkled.

CAPTAIN OF THE BLUES (Waverly). Large and distinct. Bluish purple shading to lilac at margin.

COUNTESS SPENCER. The original of this type. Soft rose-pink, deepening somewhat at the edges.

DAINTY SPENCER. White ground with beautiful picotee edge of rose pink.

DECORATOR SPENCER. The color is a rich rose overlaid with terra-cotta, intensifying to deep bright orange at base of wings. Large, true Spencer.

DOBBIE'S CREAM. Rich primrose, perfect form, waved edge, usually four flowers on a stem.

DUPLEX SPENCER. Delicate light pink on cream ground. Produces a large percentage of double flowers.

FLORENCE NIGHTINGALE. Best soft lavender.

FLORA NORTON SPENCER. Bright blue, with a little deeper tint of purple than the original Flora Norton. Large and both standard and wings are wavy. A grand flower.

FLORENCE MORSE SPENCER. Delicate blush with pink edge; a beautiful flower of the largest size.

GEORGE HERBERT. Bright rosy carmine, especially fine in artificial light. Of largest size and true wavy form, both standard and wings beautifully fluted. Fourflowered.

HELEN LEWIS (Orange Countess). Standard crimson-orange, wings orange-rose.

ILLUMINATOR. A glorious orange-salmon Sweet Pea. In a dull light the color appears to be a flat orange-scarlet, but when seen in a bright light the color is completely changed.

IRISH BELLE. The color of this variety is very uniform in both standard and wings, a rich lilac flushed with pink which gives a very distinct soft tone throughout the entire flower.

KING EDWARD SPENCER. Rich crimson-scarlet, large and of fine form; the best of this color.

LOVELY SPENCER. Soft shell pink shading to blush and almost white at the edges; large and wavy.

MRS. ROUTZAHN SPENCER. Ground buff or apricot, suffused with delicate pink or rose, with a decided rose edge.

MRS. SANKEY SPENCER. Opens with a slight tint of pink, but soon turns a clear white. Very large, black-seeded.

MRS. WALTER WRIGHT SPENCER. Deep purplish mauve, self-colored.

OTHELLO SPENCER. Of immense size with large drooping wings and large wavy standard; rich maroon, very dark.

PRIMROSE SPENCER. Not so large as some of this class, but especially desirable because of its color, a pronounced primrose or creamy yellow.

PRINCE OF WALES SPENCER. Rose-crimson, almost self-colored. Much like, or identical with, Marie Corelli.

QUEEN VICTORIA SPENCER. Enormous flowers of deep primrose, suffused with rose; of good form and substance and with the true Spencer wave to the three or four flowers on a stem.

RAMONA SPENCER. Clear white, with soft, delicate lines and flakes of blush-pink. Standard and wings wavy and fluffy.

SENATOR SPENCER. The color is a varying combination of deep claret and chocolate, striped and flaked on a ground of light heliotrope. Very large.

THOMAS STEVENSON. The flowers are of largest size and true Spencer type. The standard is an intense flaming orange, while the wings are rosy carmine, shaded orange. Very vigorous.

WHITE SPENCER. Pure white. Of the largest size, has beautifully poised wings and the standard is erect and wavy. Stems often 12 inches long.

Sweet Peas

GRANDIFLORA OR STANDARD VARIETIES



LOVELY

OUR BEST MIXED

1295 This mixture we make up ourselves of the choicest large flowered varieties including the best of the standard varieties, all of the varieties of the New Giant and Orchid Flowered, both of the Spencer and Unwin Types and many of the un-named Spencers. This mixture comprises all shades but is blended in carefully studied proportions and is the most desirable and popular mixture which can be produced. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.40.

CHOICE MIXED

1296 Also prepared by us; a well-blended mixture, comprising many of the large-flowering varieties of the older type, and Eckford's Large-flowering Hybrids in great variety. The mixture will compare favorably with those generally offered at a higher price, and is surpassed only by mixtures which, like our Best Mixed, contain the new orchid-flowering varieties. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., $\frac{1}{2}$ lb. 40 cts., lb. 75 cts.

SWEET PEA COLLECTIONS

Many of our friends and customers frequently ask us to select the best varieties. To meet these requests we have prepared the following assortments.

All of the following kinds at uniform price.

- Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.40.
- 995 **AMERICA.** White, striped and splashed with carmine.
- 1005 **APPLE BLOSSOM.** Crimson pink, shading lighter, wings white, tinted pink.
- 1010 **AURORA.** White, striped and flaked orange pink, very attractive.
- 1015 **BLACK KNIGHT.** Glossy deep maroon; large, open form.
- 1020 **BLANCHE BURPEE.** White, popular but not equal to Dorothy Eckford.
- 1025 **BLANCHE FERRY.** The popular pink and white.
- 1035 **BOLTON'S PINK.** Pink shaded rose.
- 1036 **CAPTAIN OF THE BLUES.** Purple, wings bright blue.
- 1040 **DAINTY.** Clear white, edged with rose pink.
- 1042 **DOBBIE'S MID BLUE.** Brightest blue of all.
- 1045 **DOROTHY ECKFORD.** The largest pure white of this class.
- 1055 **DUKE OF WESTMINSTER.** Standard clear purple; wings purple, tinted violet.
- 1060 **EARLIEST OF ALL.** Pink and white.
- 1061 **EARLIEST WHITE.** Pure white, very early.
- 1075 **EMILY HENDERSON.** Pure white; large, open form, petals of more substance than other white sorts; not so graceful in form as the hooded varieties; stems very thick. Vigorous grower and blooms profusely.
- 1080 **FLORA NORTON.** Almost true sky-blue.
- 1082 **FLORIST LAVENDER.** One of the best of this shade, long-stemmed, plant vigorous.
- 1110 **JEANNIE GORDON.** Standard bright rose, wings primrose, tinted light rose.
- 1125 **KING EDWARD VII.** Crimson-scarlet, large; the best of this color.
- 1135 **LADY GRISEL HAMILTON.** Soft lavender, tinted with mauve in standard.
- 1150 **LOTTIE ECKFORD.** White, edged lavender.
- 1155 **LOVELY.** Soft shell-pink, a beautiful flower.
- 1161 **MIDNIGHT or BLACKBIRD.** Indigo blue and violet. The darkest shade in sweet peas.
- 1170 **MISS WILMOT.** Bright orange-pink, veined with deeper shade.
- 1200 **MRS. WALTER WRIGHT.** Rosy purple, self-colored.
- 1215 **OTHELLO.** Very dark maroon; large.
- 1220 **PRIMA DONNA.** The popular clear pink.
- 1230 **PRINCE OF WALES.** Rose-crimson, self-colored.
- 1234 **QUEEN ALEXANDRA.** Intense scarlet, does not burn in sun; large.
- 1235 **QUEEN VICTORIA.** Light primrose, self-colored; black-seeded.
- 1265 **STELLA MORSE.** Buff with tint of pink; when bunched has rich cream effect.
- 1275 **THE HON. MRS. E. KENYON.** Light primrose, self-colored; the best of this shade.
- 1290 **WHITE WONDER.** Pure white; many double flowers.

GRANDIFLORA COLLECTIONS

One packet each of six Grandiflora varieties in six separate colors for 25 cts postpaid.

Dorothy Eckford, white; King Edward VII, red; Lady Grisel Hamilton, lavender; Prima Dona, pink; Black Knight, maroon; Dobbies Mid Blue, bright blue.

SPENCER COLLECTION

One packet each of six Spencer varieties in six separate colors for 50 cts. postpaid.

White Spencer, King Edward VII Spencer, red; Countless Spencer, pink; Asta Ohn Spencer, lavender; Helen Lewis Spencer; orange; America Spencer, striped.

PLANTS FOR THE VEGETABLE AND FLOWER GARDEN

Home Grown Runners for Spring Planting. Potted Plants for Fall Planting

We have our own greenhouse for the testing of seeds and growing of plants, specially for our most critical retail trade. With a man of long experience in charge, we hope to be able to furnish our customers with a better grade of plants than what we have been able to do in the past, where we were dependent upon other growers for our supply. We hope to be able to furnish tomato, lettuce, cabbage, and celery by the thousand, also other annuals and bedding plants.

The strawberry plants we offer are of our own growing, are always dug after order is received and carefully packed, insuring delivery to customer in best condition possible. Their condition will be found greatly superior to those generally received from the West or South, the latter being sold so cheap that the necessary care in preparing them for shipping cannot be afforded. The probably different conditions could be considered when comparing prices. We offer only a few—but the best varieties, and see no reason for offering others inferior in various respects. Varieties marked (p) have imperfect flowers and require to be grown with them, some of the staminate (s) forms, one row in five of the latter being sufficient.

PAN AMERICAN. An ever-bearing variety. You can have strawberries until the snow flies if you plant this kind. Fruits during the entire season.

BLACK BEAUTY, P. A late variety. This is the result of scientific breeding for a number of years. Berries dark red, and can be left on the plant several days after ripening. Good for the home garden.

GOLDEN GATE. A mid-season variety. Strictly fancy berry but needs high cultivation and good soil. Berries are large, dark glossy red, and very attractive. They are also very firm and a good shipper.

BRANDYWINE. S. A late and handsome, large berry conical in shape; dark glossy red, plant vigorous and productive.

BUBACH. P. A large but uniform berry of good color, one of the very best.

GLEN MARY. S. A good kind for the kitchen garden. Fruit conical, bright red, and fine flavor.

SAMPLE. P. One of the best market berries in cultivation. Fruit of fine color and flavor; one of the best for general crop.

DOWNING'S BRIDE. S. One of the best for either market, or the home table; in fact, it should be in every garden. Berries of this variety bring from two to five cents per quart more than any other kind in the Worcester Markets. Fruit uniform in size, shape and color. Ready as soon as plants start in the spring.

Runners, \$1 per 100, \$7.50 per 1,000. Ready in Spring. Potted plants, \$2.50 per 100. Ready after August first.

Vegetable Plants

The plants that we are prepared to furnish are always of our own careful growing, and we know will give entire satisfaction.

Egg Plant, doz. 35 cts.

Cauliflower, doz. 20 cts., \$1.00 per 100.

Tomato, leading kinds, 25 cts., per doz., \$1.75 per 100.

Lettuce, 20 cts. per doz., \$1.25 per 100.

Pepper, 20 cts. per doz., \$1.50 per 100.

Cabbage, early kinds, 20 cts. per doz., \$1 per 100.

Cabbage, late kinds, for general use, 75 cts. per 100, \$5 per 1,000.

Celery, early kinds, 25 cts. per doz., \$1.50 per 100.

Celery late or winter kinds, \$1 per 100, \$5 per 1,000.

Special prices in lots of 5,000 or over.

ASPARAGUS ROOTS

ASPARAGUS ROOTS. All kinds listed in vegetable section; strong roots, uniform price. Postpaid, 50 for 65 cts., by express, 100, 75 cts., 1,000, \$5.50.

RHUBARB ROOTS

RHUBARB ROOTS. One-year-old roots from seed, each 10 cts., per 100, \$8.

HOLLYHOCK ROOTS. 20 cts. each, postpaid. By express 15 cts. each, \$1.50 per doz., \$10 per 100, 50 at 100 rate.

IRIS GERMANICA

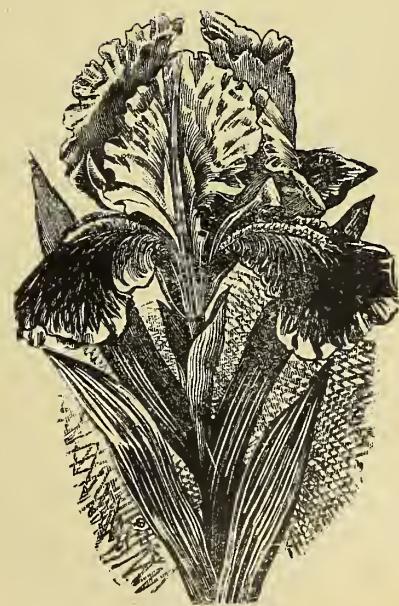
(GERMAN IRIS. FLEUR-DE-LIS)

One of the most easily grown and best hardy plants for the amateur. While it attains to the greatest degree of perfection on rich, moist soil, it nevertheless thrives on all soils, even that which is considerably sandy. It blooms in May or June, a time when at most there is not an abundance of flowers and the flowers of but few hardy plants equal, if they approach, the peculiar orchid-like beauty of this plant. And unlike most other hardy plants of which the period of blooming is as short, the foliage is fresh and attractive the entire season, while the plant is of the hardiest nature. Though somewhat generally known and considerably cultivated, it is not to the extent its merits warrant, nor when grown does it usually comprise as wide a range of color as it might. It should be one of the first plants selected for a perennial border for a new home, whether it be a cottage or a mansion.

Mixed varieties. A mixture of choice varieties of our own growing. Large roots, freshly dug. By express only, doz. 60 cts., 25 for \$1.50; 100, \$2.50.



A POTGROWN STRAWBERRY PLANT



GERMAN IRIS

GENERAL LIST OF VEGETABLE SEEDS

While we invite a comparison of our prices with those of any reliable dealer, we wish to lay much the greater emphasis on the fact that "QUALITY" is the paramount feature considered in what we have to offer.

FREE DELIVERY.—We deliver postpaid to any post-office in the United States all seeds quoted by the packet, half-ounce, ounce and quarter pound at catalog quotations for such quantities. Owing to Parcel Post Rules establishing zone rates for all packages above $\frac{1}{2}$ lb. in weight, our prices for seeds above $\frac{1}{4}$ lb. do not include postage.

BAGS.—Hereafter we shall make no charge for bags, boxes or barrels used in filling orders for seeds at prices quoted in this catalog. This applies to retail orders only. Bags used in shipping wholesale orders and special large retail orders, will be charged at cost but may be returned if in good condition and post or express charges prepaid. No charge for bags on Eureka Corn.

HOW TO ORDER.—With remittances, for first order always use the attached Order Blank. In any event give first your post-office address, which is sufficient for orders to be sent by mail. State plainly if goods are to be sent by express or by freight, and to what point if different from post-office. Customers having an account with us are requested not to use the order blank but instead use their own stationery.

DO NOT ORDER LARGE, HEAVY LOTS OF SEEDS SENT BY EXPRESS unless you are certain that you are willing to pay the express charges which, even with the reduction now made on such shipments by the express companies, are much more than freight charges.

But do not order a few pounds of seeds sent by freight which could be sent as cheaply, more safely, and which would reach you much sooner if sent by express.

REMITTANCES for small orders may be made in postage stamps, but if stamps are used, care should be taken that they are not moistened by handling. Enclosing in oiled paper is much the safer way to send them.

FOR LARGER ORDERS, remittances should be made by Express Money Order, P. O. Money Order, Bank Draft, or Registered Letter, all of which are inexpensive and absolutely safe.

C. O. D. ORDERS. In no case will C. O. D. orders be accepted unless 25 per cent of the amount is sent with the order. If possible to do otherwise, do

not order goods to be sent in this way. It is much preferable, when not convenient to remit with order, to give the order to an express company. The goods will generally arrive sooner, and the express companies make no extra charge for this service, as they do for collecting and returning money. No goods will be shipped with bill of lading unless 25% of the price is paid in advance.

Parties having no account with us are requested to send references if they wish to open an account. Bank references always preferred. If not convenient to give that, give some Town Official. No reliable seed house can be expected to ship goods to unknown parties without reference.

All prices in this catalog are made as low as the quality of the goods will justify, but as the market on everything is liable to change which is especially true on seeds and seed potatoes, prices quoted are subject to change without notice. This applies to both advance and decline in prices.

IT IS OUR CONSTANT ENDEAVOR to ship all orders promptly, and to use all possible precautions to prevent mistakes, but, for various reasons, slight delay in shipping is sometimes unavoidable, and mistakes will sometimes occur. Orders are always promptly acknowledged, and, if for any reason they cannot be filled at once, the customer is notified. If, after a reasonable time has elapsed, the goods have not been received, nor either acknowledgment of order or notification of shipment, it may be assumed that the order has been miscarried or been overlooked. In such event we should be notified and the order repeated, when we will at once endeavor to trace the order, and having found it, give it precedence in filling and shipping over all others. All mistakes of whatever nature will be promptly and cheerfully rectified as soon as brought to our notice.

ROSS BROTHERS COMPANY gives no warranty, expressed or implied, as to description, purity, productiveness or any other matter, of any Seeds. Bulbs or Plants it sends out, and it will not be in any way responsible for the crop.

ASPARAGUS

An ounce will sow about 60 feet of drill, and produce 200 or more plants.

To grow asparagus from seed, sow as early as ground can be worked. Make the soil rich and sow in drills one foot apart and an inch or more deep. If the bed has good care, the roots may as well be transplanted to the permanent bed early the following spring as to wait another year, as is generally done. The soil should be thoroughly and as deeply worked as possible and can hardly be made too rich. In the field, the rows should be from four to six feet apart, but in the garden where the cultivation is to be done by hand the rows may be as close as two feet apart. Make broad trenches 8 inches deep, and if the roots are well spread, the crown will be 6 inches below the level. Cover with but an inch of soil at time of setting, filling the trench gradually as the plants grow. The plants should have frequent cultivation and yearly heavy applications of manure or fertilizer. The third year from setting, two or three cuttings may be made; after that, all that are possible until time for early peas.

CONOVER'S COLOSSAL. A standard variety. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 70 cts.

COLUMBIAN MAMMOTH WHITE. Large stalks; clear white until 3 or 4 inches high.

Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 70 cts.

PALMETTO. Early and productive. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

Asparagus Roots

We can furnish strong two-year old roots of the three varieties listed, 50 in a bunch, at the following prices.

CONOVER'S COLOSSAL, per 50, 65 cts. postpaid. Per 100, 75 cts.; per 1,000, \$5.50.

COLUMBIAN MAMMOTH WHITE.

PALMETTO.

BRUSSELS SPROUTS

A very hardy plant of the cabbage family, growing from 2 to 3 feet high, producing from the sides of the stalk numerous small heads about 2 inches in diameter. Sow about the middle of May, and treat generally as directed for cabbage.

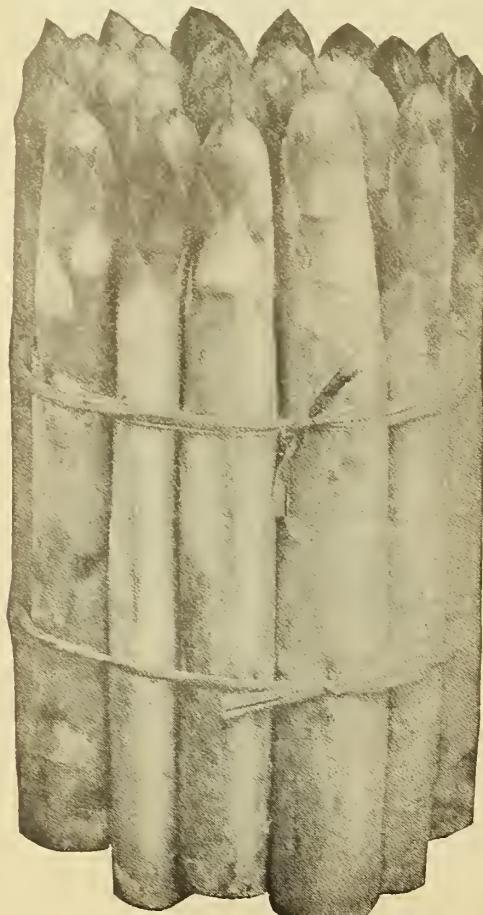
IMPROVED HALF-DWARF. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

ARTICHOKE

One ounce will produce about 500 plants.

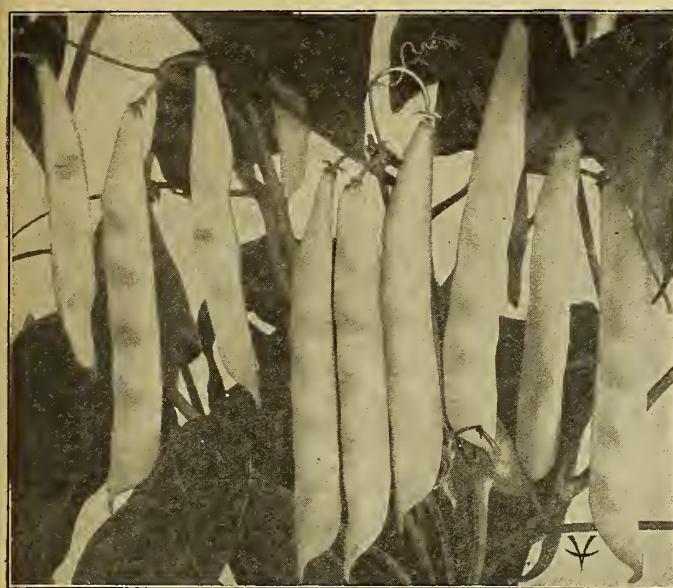
The Globe Artichoke is cultivated like asparagus for its flower heads which are used before they are fully developed. Plant the seed early in spring in rows twelve inches apart covering one inch deep. Transplant the following spring to rows three to four feet apart and one foot apart in the row. Upon the approach of winter the stems and leaves should be cut away and where the winters are severe the beds should be covered with leaves or dry litter to keep the crowns from freezing. To treat as an annual, sow the seed in hot-beds in February and transplant into moist, rich soil in May.

LARGE GREEN GLOBE. The best variety for general use. The heads are large, very thick and fleshy. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. \$1.00.



READ THIS—

There has never been a season that is remembered, when the supply of Dwarf Wax and Green Podded Beans was as short as it is this year. In many instances the bean-growers did not get back one-half of the seed which they planted. There will not be sufficient of these varieties this season to meet the demand. Our supply is limited but we hope to be able to take care of our customers' wants in this line. Please bear this in mind and order beans early.



IMPROVED GOLDEN WAX

Dwarf Wax, or Butter Beans

GOLDEN WAX. An old, well-known and popular variety of excellent quality. Pods flat, long, golden yellow. Early and productive. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.15, $\frac{1}{2}$ pk. \$2.25.

GOLDEN-EYED WAX. Next to Horticultural Wax in its freedom from rust, and superior to that in quality though not equal to most others in the list. Pods of good length, flat, straight, waxy yellow and attractive. Popular with market-gardeners. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.15, $\frac{1}{2}$ pk. \$2.25.

HORTICULTURAL WAX. Has been proved by several years' trial to be entirely immune from rust and blight in the most unfavorable seasons. And while this immunity is attained at sacrifice of quality, the variety has become popular with many gardeners because of the certainty of securing a crop and as well because the plant bears early and abundantly and pods are of good size and attractive. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.15, $\frac{1}{2}$ pk. \$2.25.

PROLIFIC BLACK WAX. One of the best for the home garden, entirely stringless, and of excellent flavor. Pods are medium size round and of a very clear waxy white color. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.15, $\frac{1}{2}$ pk. \$2.25.

HODSON WAX. A new and distinct variety, about two weeks later than others but surpassing most others in its combination of large, handsome pods, good quality and immunity from rust. It is also above the average in productiveness. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., 2 qts. \$1.15, $\frac{1}{2}$ pk. \$2.25.

BURPEE'S WHITE WAX.
DAVIS' WHITE WAX.
ROUND-POD KIDNEY WAX.
WARDWELL'S KIDNEY WAX.

} Crop failure on these varieties.

Dwarf or Bush Beans

Green-Podded Varieties.

BOUNTIFUL. Vine unusually thrifty, rarely affected by blight, bears early profusely and for a long time. Pods large, flat but thick and meaty, stringless and tender. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

EARLY RED VALENTINE. An old favorite. Vine hardy and productive; pods round, of medium length, thick, tender, and of fine flavor. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

EARLY YELLOW SIX WEEKS. The vines of this variety, known also as Long Yellow Six Weeks, are large, vigorous, erect and very productive. The leaves are large. The pods are long, about six inches, straight, flat, handsome, rather light green and when young are of good quality for snaps. This sort is early maturing and a fine shipper. Seed medium sized, long, kidney shaped, light yellow with small brownish circle about the eye. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

Prices quoted on this page are not postpaid.

BEANS

A quart will plant about 100 feet of drill
1 $\frac{1}{2}$ bushel will plant an acre

Beans succeed best in warm, light soil of at least average fertility. In this latitude it is not usually safe to plant much earlier than the middle of May. If planting is made earlier and is followed by especially wet or cold weather, the planter should not blame the seedsman if beans fail to germinate. Plant the dwarf varieties in drills 2 or 3 feet apart, about 2 inches deep, and thin plants 4 to 6 inches apart. Give frequent, shallow cultivation until time of blossoming.

Dwarf, or Bush Beans (Continued)

Green-Podded Varieties

LOW'S CHAMPION. Vine of rank vigorous habit, seldom affected by blight or mildew; productive; pods large and well filled. Beans large, oval, red, of finest quality. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

DWARF HORTICULTURAL. Pods thick, broad, of medium length, yellowish green splashed with red when at the stage of fitness for green shell beans and are then very attractive. Beans are large, oval, easily shelled and of fine quality. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65.

FRENCH HORTICULTURAL. This is a Bean of the Horticultural type which has been grown quite extensively in some localities by the Market Gardeners for a number of years. The vines are compact and of upright growth; almost always sending out runners to a height of one and one-half to two feet but do not climb a pole and are not of sufficient length to affect the bean in any way. The pods when ready to use are a yellowish green splashed with a bright crimson. Very prolific. $\frac{1}{2}$ pt. 20 cts., pt. 33 cts., qt. 60 cts., 2 qts. \$1.10, $\frac{1}{2}$ pk. \$2.00.

MAMMOTH GREEN POD STRINGLESS. Vine vigorous and extremely productive. Pods long, nearly round, meaty and stringless. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

GODDARD, or BOSTON FAVORITE. Vine very large, vigorous and productive. Pods long, larger than the Dwarf Horticultural, similar in color and marking. Beans large, kidney-shaped, of excellent quality. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

IMPROVED YELLOW EYE. A well-known and popular variety for baking. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.90.

BOSTON SMALL PEA. More largely used than any other variety for baking. Choice selected. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.90.

Dwarf Lima Beans

Lima Beans are more tender than others and should not be planted in this latitude before May 20 or 25 and if the season should be unusually wet and cold not until June 1. Plants of this class should not stand nearer than one foot in the row and rows should be 3 to 3½ feet apart.

HENDERSON'S BUSH LIMA. A bush of the Sieva Lima; beans small but vine is productive and bears early. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

BURPEE'S BUSH LIMA. A bush form of the Large Lima which it closely resembles and approaches in size. Very popular. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

BURPEE'S IMPROVED BUSH LIMA. A distinct strain. The earliest, largest and the best of all large Limas. This new strain differs from the popular Burpee's Bush Lima in bearing uniformly much larger pods, producing more beans, while both pods and beans are much larger and thicker. While the beans are as large as those of the Large Lima, the crop of the Improved is ready for gathering from eight to ten days earlier. In quality, the beans are equal to any, being thin-skinned, juicy and of fine flavor. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

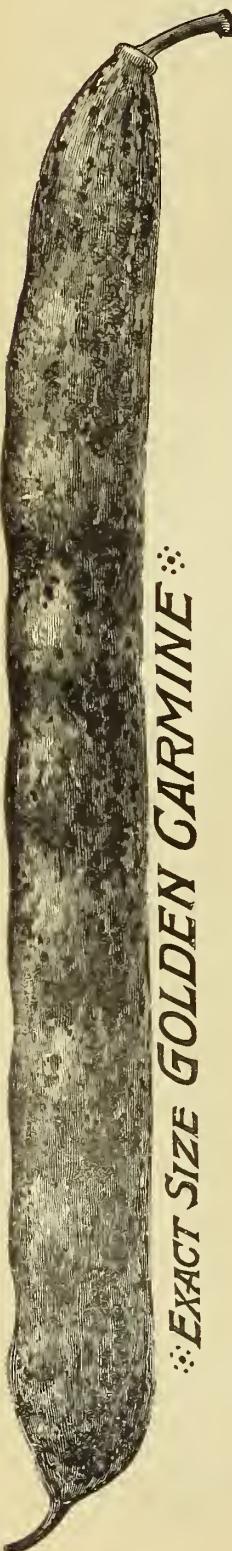
FORDHOOK BUSH LIMA. The Fordhook Bush Lima Bean is not a selection made by man from the Dreer's Bush Lima, but created by nature, a single sport found in the field of Dreer's, or Challenger Pole Lima and has now become one of the leading varieties of Bush Lima Beans. The plant is of stiffly erect habit, the beans are much larger and of superior quality and even when full size are juicy and of fine flavor. $\frac{1}{2}$ pt. 18 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.65, pk. \$3.00.

DREER'S BUSH LIMA. A dwarf form of the Dreer's Pole Lima; beans are of distinct form being much thicker than other Limas. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

For Parcel Post rate, see inside front cover.

BEANS—Pole or Running

A quart will plant 100 to 150 poles



Although pole beans require considerable care and labor, they are when properly grown usually of longer bearing period. Pole Beans are more sensitive to wet and extremes of temperature than the dwarf varieties and should not be planted as early. Poles should be set in rows about 4 feet apart, preferably running north and south, allowing about 3 feet between the poles in the row. The safer way is to plant six to eight beans around each pole and thin to three or four plants. Beans should be about 2 inches below the surface and are more generally pressed into the soil, eye down, instead of dropped and covered, as they come up a little sooner planted in this way. Like the dwarf beans they require frequent shallow cultivation.

WORCESTER MAMMOTH HORTICULTURAL. Resembles the Old Pole Horticultural but pods and beans are much larger. Also the pods being more highly colored are more attractive, which greatly increases the value of the variety for market. The vine is vigorous and very productive and the beans have not attained their size at any sacrifice of quality. A select strain, our own growing, from extra large choice stock. $\frac{1}{2}$ pt. 17 cts., pt. 30 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.50, pk. \$2.50..

GOLDEN CARMINE HORTICULTURAL. A strain of the London Horticultural which has the additional merits of being an excellent string bean and as a shell bean of being a week or more earlier. The pods and beans are nearly if not quite as large and beans are equal in quality. Pods, when at the stage suitable for string beans, are light waxy yellow; when ready for shelling, golden yellow, splashed with bright carmine; at both stages very attractive. $\frac{1}{2}$ pt. 15 cts., pt. 28 cts., qt. 50 cts., 2 qts. 90 cts., $\frac{1}{2}$ pk. \$1.60, pk. \$3.00.

HARLEQUIN. Earlier, more productive, and with much longer and more attractive pods than the well known London Horticultural or Speckled Cranberry, also harder and a more reliable cropper. The large oval beans are of the highest quality either shelled or dry. The vines are vigorous bearing pods that are six to seven inches long striped or splashed with a deeper and more brilliant red than the London Horticultural. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., 4 qt. \$1.80.

LONDON HORTICULTURAL, or SPECKLED CRANBERRY. Pods short, broad, yellowish green, streaked with bright red. Beans in general appearance identical with Dwarf Horticultural, of about the same size, more nearly round; of the best quality. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

KENTUCKY WONDER, or OLD HOMESTEAD. Pods are borne in large clusters, are of unusual length, nearly round, silvery green; when young, crisp, entirely stringless, of fine texture and flavor. Vine bears early and is very productive. Used only as a string bean. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

GOLDEN CLUSTER WAX. Pods long, broad, thick and fleshy; borne in clusters, creamy white to golden yellow; of best quality. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 75 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.25.

"KENTUCKY WONDER WAX." This pole bean is quite similar to the very popular green podded Kentucky Wonder except that the very long pods are a little broader, and of a waxy golden yellow. These are very attractive, fleshy, stringless and not surpassed in quality. The vine is remarkably vigorous and its earliness and hardness commend the variety as one well adapted for even northern latitudes. The seed even from the most matured crops is usually somewhat shrivelled. Like the green podded Kentucky Wonder, this is very productive and we believe it to be generally superior to any other wax podded pole bean. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 75 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.25

Pole or Running Lima Beans

A quart will plant about 100 hills

These, like the Dwarf Lima are tender and should not be planted in this latitude much before the first of June, and even then a liberal quantity of seed should be used to be more nearly certain of a uniform stand. Three plants, however, are all that should be allowed to grow in a hill.

SEIBERT'S EARLY LIMA. The earliest variety; vine vigorous and very productive and continues so from the first to the last of the season. While the pods are short and rarely contain more than four beans the total yield compares very favorably with other varieties. A desirable feature of this variety is the ease with which the pods are opened owing to the fact that they are very thin. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

KING OF THE GARDEN LIMA. Earlier than the Large Lima, and pods are longer and often contain five beans of the largest size. The vine is large and of remarkably vigorous growth and will produce larger pods and bear earlier if only two are allowed to grow to the pole. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

LARGE LIMA. The old standard variety. Pods are broad, thin and borne in clusters. The vine grows tall, is vigorous but slender. Later in bearing than the preceding varieties. The beans are large and of a greenish tinge which is considered an indication of superior quality. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

CHALLENGER, or DREER'S IMPROVED LIMA. Pods short but thicker than those of other varieties and contain four or five very thick beans. While the pods are not as large as of the preceding varieties, owing to the beans being more closely together in the pod, the yield of beans is probably fully equal to that of other varieties. One of the most popular varieties with the New York market-gardeners. $\frac{1}{2}$ pt. 10 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.10, pk. \$2.00.

SWEDISH, or BROAD SWORD POLE BEAN. The pods are of light green color from eight to twelve inches in length and about one inch in width and retain their rich, tender, stringless qualities until nearly ripe. Pods contain eight to ten medium size, flat, white beans which are excellent for shelling. Planted about June 1st this bean comes into bearing about Aug. 1st and will continue until frost. Vines have grown the past season to a height of 25 ft. and the yield of pods very heavy. Pkt. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.

EXACT SIZE GOLDEN CARMINE

BEET.

An ounce will sow about 100 feet of drill
5 or six pounds required for an acre.

The beet thrives best in deep, rich, but rather light soil. Sow in drills about 15 inches apart and one inch deep. Make the soil firm over the seed. For early use, sow as soon as the ground can be worked; for fall use, in May; for winter, from the 20th of June to the middle of July, according to the variety. Thin plants to 4 or 5 inches apart. Give frequent shallow cultivation.

ROSS PERFECTION. A strain selected by us as the best early beet for the Market Gardener. Nearly as early as the Early Egyptian but the roots are much thicker and more regular in shape. By careful selection the coarse-fleshed and light colored specimens have been practically eliminated. The tops are even in growth and a little smaller than the Egyptian, making it an ideal beet for all uses. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.50.

EARLY EGYPTIAN. The earliest variety; roots flat; deep crimson; top small. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

CROSBY'S EARLY EGYPTIAN. An improved form of the preceding; roots much thicker and more regular. Nearly as early and of better quality. The most popular early variety for market throughout New England, if not elsewhere, and is now being considerably used for last sowing. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

CROSBY'S EARLY EGYPTIAN EXTRA-SELECTED STRAIN. For several years we have given this especial attention and have largely succeeded in eliminating the light-colored, coarse fleshed specimens peculiar to the Egyptian. Roots are more uniform in shape and tops are more even in growth and a little smaller. We confidently recommend it to market-gardners as an unsurpassed strain. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.50.

BASTIAN'S EARLY. Roots to light-colored to be popular for market but of finest flavor. Very tender and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1.00.

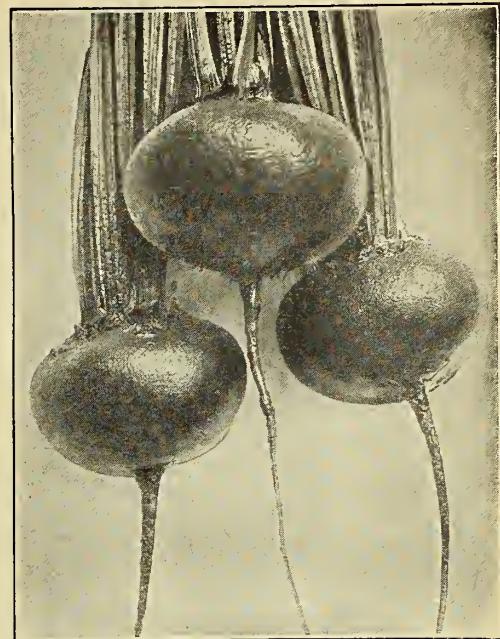
EARLY ECLIPSE. An early globe-shaped variety of good quality and deep color. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

EDMAND'S BLOOD TURNIP. A standard variety used for both second-early and main crop. Of good quality and keeps well. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

DEWING'S BLOOD TURNIP. One of the leading main-crop varieties. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

DETROIT DARK RED. A superior second-early and main-crop variety rapidly growing in favor for late planting. Tops uniformly small and grow upright so that the rows may be close together. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.50.

SWISS CHARD, or SILVER SEA KALE BEET. Used for greens only. Until recently but little used in this country but for the last few years has rapidly increased in favor. Much superior to other beets for greens. Of very rank growth, plants should be thinned to about one foot apart. When the plants have attained full size, the stems and midribs are sometimes cooked and served like asparagus. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.



SELECTED CROSBY'S EGYPTIAN

SUGAR BEETS and MANGEL-WURZELS FOR STOCK FEEDING

Roots of all kinds are highly valuable for stock feeding and are worth more general cultivation than they have had in the past. A liberal feeding of Mangels insures a large flow of milk and healthy condition of the animals. Fifteen or twenty tons per acre is not an unusual yield for any of the large growing varieties. They are easy to cultivate and can be raised almost wholly with horse culture and will respond readily to any kind of fertilizer. A yield of 20 tons per acre is equal to 2 tons of the best Timothy Hay or 65 bushels of corn, but they will produce more milk, and in addition to the feeding value found in protein and fat, you also get a large amount of water, which, to our mind, has a feeding value in any of our field crops.



SWISS CHARD

GOLDEN TANKARD. It is one of the best stock beets grown. It has yellow flesh, a very distinct variety, being short with very little tap root and very easy to harvest. Top and neck very small; root ovoid, flesh yellow, zoned with white; an excellent sort. Price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts. lb., 55 cts., 5 lbs. or over, per lb. 50 cts.

LANE'S SUGAR BEET. A standard variety for stock-feeding. Price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 55 cts., 5 lbs. or over, per lb. 50 cts.

MAMMOTH LONG RED. Mammoth size; skin light red, flesh white and rose. Grows well out of ground. Price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 55 cts., 5 lbs. or over per lb. 50 cts.

NORBITON GIANT LONG RED. Similar to the preceding; has smaller top and neck; flesh scarlet. Price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 55 cts., 5 lbs. or over, per lb. 50 cts.

ORANGE GLOBE. Top small root medium-sized; skin deep orange-yellow, flesh white. Grows almost out of the ground; good for shallow ground; easy to harvest. Price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 55 cts., 5 lbs. or over, per lb. 50 cts.

MANGEL RIVENHALL GIANT. This is one of the finest types of the yellow globe mangel in cultivation. The roots are immense size and exceptionally even in shape. The skin is an orange-yellow with a reddish yellow base. The flesh is white, being firm and fine grain which renders it an excellent keeping variety. It grows fully three-fourths above ground with a very small tap root which makes it well adapted to light soil. Price, oz. 10 cts., $\frac{1}{4}$ lb. 20 cts., lb. 55 cts., 5 lbs. or over per lb. 50 cts.



RIVENHALL GIANT MANGEL

CABBAGE

An ounce will produce about 2,000 plants

Cabbage will thrive on any good garden soil but is more successfully grown on deep, strong loam, and new soil is much preferable, as on old land the roots are more liable to be affected by the disease called club-root. Especially should land be avoided upon which, within two years, cabbage, cauliflower, turnips or radishes have been grown.

For the earliest crop seed is usually sown in February or March in hotbeds with only moderate bottom heat, and the plants hardened by gradually exposing them to the night air and transplanted as early as the ground is in suitable condition.

Seed of the second-early, autumn and winter varieties, may be sown in the open ground. If a second crop is desired to follow closely the early crop, seed of some second-early sort should be sown as soon as ground can be worked. For later crops, successive sowings may be made, in this latitude, until about the middle of June, possibly some later, the time depending somewhat on the nature and condition of the soil, the season, and more on the variety, such kinds as All Seasons and Volga requiring considerably less time than the Danish Ballhead. Some growers prefer to sow the late varieties in hills where the crop is to be grown, thinning to one plant at first hoeing, but more often seed is sown in beds and transplanted.

EARLY JERSEY WAKEFIELD. The standard early variety. Head conical. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

CHARLESTON EARLY WAKEFIELD. Larger than the Jersey Wakefield, a few days later. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

EARLY SPRING. The earliest flat-headed variety, maturing soon after the Jersey Wakefield, but much larger. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

COPENHAGEN MARKET. The earliest large round headed cabbage yet introduced. A most excellent sort both for the home garden and market gardening trade. May be used as a medium for late cabbage by successive planting as its keeping qualities are excellent. See specialties, page 18, for illustration and full description. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts., 2 ozs. 75 cts., $\frac{1}{4}$ lb. \$1.25. Lb. \$4.00, postage extra.

HENDERSON'S EARLY SUMMER. An early large heading sort. Head flat or slightly conical, remains on stump longer without bursting than most early kinds. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

ALL SEASONS. For reliability in heading not surpassed by any other variety, and few equal it in ability to stand the hot sun and dry weather and when mature to remain in the field so long without bursting. Head as large as most of the later sorts, nearly round or somewhat flattened, solid and of finest quality. Extensively used for both second-early and main crop. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

EARLY WINNINGSTADT. Head large, conical, hard and keeps well. Plant very hardy and sure to head. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.60.

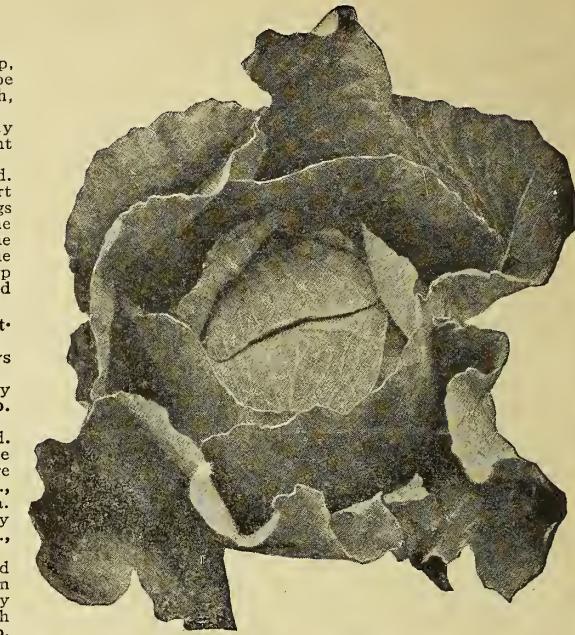
FOTTLER'S BRUNSWICK. An early large drumhead which has been in New England one of the most popular second-early varieties. Head flat, solid, keeps well and of good quality. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

PREMIUM FLAT DUTCH. An old standard late variety. Head large, flat and solid. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

SUREHEAD. Of the flat Dutch type, but head is thicker. Remarkable for its uniformity and certainty to head. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

WARREN STONE MASON. An improved strain of the old Stone Mason. Previous to the introduction of the Danish Ballhead the most popular variety in New England for main crop. Earlier and more nearly round than the old strain, of medium size, hard, solid and of excellent quality. Reliable and keeps well. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

AUTUMN KING or WORLD BEATER. One of the largest hard-heading varieties, thick flattened head, solid and keeps remarkably well but requires rich, strong soil and a long season to fully develop. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.



DANISH BALLHEAD

DANISH BALLHEAD. The most popular and profitable late variety for market. Head of medium size, round, extremely hard, solid, heavier than any other variety, keeps remarkably well and stands shipment better than any other. Plant vigorous and very hardy with rather longer stem than most American varieties. Leaves large but few. Requires a longer season than the native varieties. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50. See page 18.

MARBLEHEAD MAMMOTH. On rich land with good cultivation heads attain an enormous size; large crops have been grown of which heads averaged 30 pounds, while specimens weighed twice that. The best of all for stock or poultry. Requires a long season. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

AMERICAN IMPROVED SAVOY. The best of the Savoy type, which should be more largely grown. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

MAMMOTH ROCK RED. Head larger and more solid than Red Drumhead; reliable in heading. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.10.

DANISH STONEHEAD. A new red variety. See specialties page 18 for description and price.

VOLGA. One of the earliest main crop cabbages of superior quality. Very desirable where a large uniformly round head with short stem and compact growth is wanted. It is also exceptionally hardy, usually very solid and a good keeper. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 oz. 45 cts., $\frac{1}{4}$ lb. 75 cts., 1 lb. \$2.50.

"ENKHUIZEN GLORY"

This comparatively new cabbage has proved to be the best second-early variety yet introduced. Earlier than the "All Seasons" it is more solid than either that or "Henderson's Early Summer" and is of better shape than either, being nearly round, approaching closely in this respect the new "Copenhagen Market." Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

CAULIFLOWER

An ounce will produce about 2,000 plants.

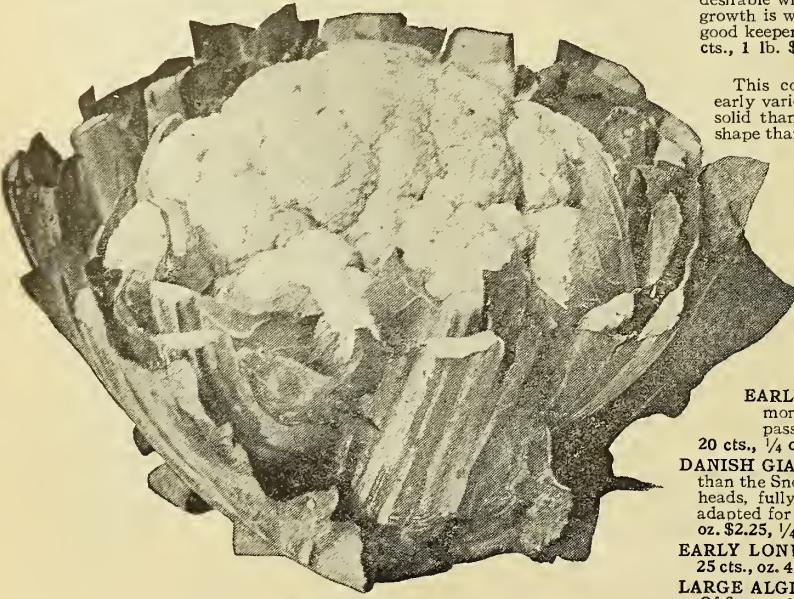
In general, the Cauliflower requires about the same treatment as the cabbage; moist land is, however, more essential and heavier manuring and more frequent cultivation aid to a greater extent the full development of the plant. In this climate the plant heads well only in the cool fall months. Seed should therefore be sown as for late cabbage, from the middle of May to middle of June, the later varieties, however, requiring a little more time than most late cabbage.

EARLY SNOWBALL. The earliest and surest to head. Probably more largely used than all others combined. We offer an unsurpassed strain from one of the leading growers in Denmark. Pkt. 20 cts., $\frac{1}{4}$ oz. 60 cts., $\frac{1}{2}$ oz. \$1.10, oz. \$2.00, $\frac{1}{4}$ lb. \$7.50. See page 18.

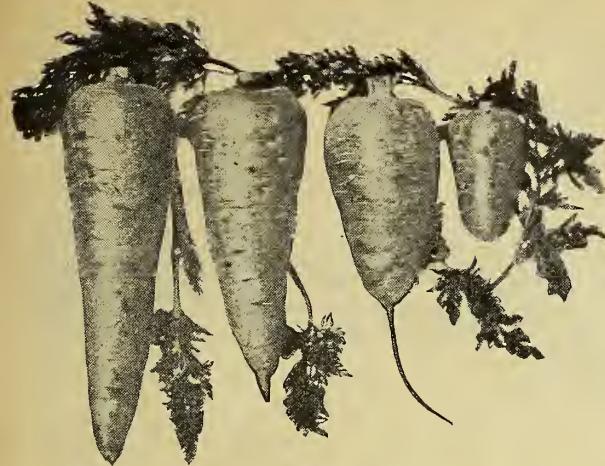
DANISH GIANT, or DRY WEATHER. About ten days to two weeks later than the Snowball. Of dwarf growth, producing large, hard and snow-white heads, fully protected by foliage. As indicated by the name, especially adapted for dry and hot climates. Pkt. 20 cts., $\frac{1}{4}$ oz. 65 cts., $\frac{1}{2}$ oz. \$1.25, oz. \$2.25, $\frac{1}{4}$ lb. \$7.50.

EARLY LONDON. Matures soon after the Snowball. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 45 cts., 2 ozs. 75 cts., $\frac{1}{4}$ lb. \$1.25.

LARGE ALGIERS. A late variety; one of the surest of this class to head. Of fine quality. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts., oz. 75 cts., $\frac{1}{4}$ lb. \$2.25.



EARLY SNOWBALL CAULIFLOWER



DANVERS CHANTENAY OX HEART SCARLET HORN

CARROT

An ounce will sow about 150 feet of drill; 3 pounds to the acre.

The Carrot thrives best in a light, sandy soil, free from stones well enriched, and deeply and thoroughly worked. Make the top surface fine and smooth by raking. Sow in drills 14 inches apart and half an inch deep and thin plants to 3 or 4 inches apart. Sow from the middle of April to the middle of May.

EARLY SCARLET HORN. A small early variety used by market-gardeners for bunching. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

CHANTENAY. A medium early variety growing in popularity with market-gardeners for bunching. Roots thick, uniformly half long, tapering slightly, stump rooted; deep orange-red. Flesh very tender. Tops of medium size with small neck. Pkt. 5 cts., oz. 15 cts., 2 oz. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

DANVERS HALF LONG. The most popular variety for market on account of its attractive form, and largely grown for stock. A little longer than the Chantenay, not as thick, smooth deep orange. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

ST. VALERY. Known also as Point-rooted Danvers. Roots are longer than the Danvers resembling somewhat in form the Long Orange. Color rich deep orange; quality, the best. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

GUERANDE, or OX HEART. Roots very thick, four and one-half to five inches long tapering but little and ending abruptly in a small tap root, tender and sweet while young. Flesh, bright orange. Used considerably for bunching early in the season. A desirable variety for growing on hard, clayey soils. Easily harvested. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

RUBICON. Like the Ox Heart in form but larger. One of the best to grow for feeding stock. Will produce a greater weight than the Danvers and is more easily harvested than the Long Orange. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.25.

LONG ORANGE. A standard variety grown mainly for stock but used to some extent for market. Of rich deep orange color and fine quality. Pkts. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 45 cts., lb. \$1.50.

LARGE WHITE BELGIAN. Grows one-third out of ground. The portion above ground is green, that below white, large and rather coarse. Used only for stock. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 90 cts.

CELERY An ounce will produce from 3,000 to 4,000 plants.

It requires about three months from sowing until the seedlings are ready to set in permanent place. For early setting, seed may be sown indoors in shallow boxes or in a cold frame, for later setting early in the open ground. Sow in fine soil, cover lightly and firm soil well with hoe or board. Keep soil moist, until seed germinates, nearly wet. When two or three inches high transplant so plants will be three inches apart each way. Shearing off the tops when plants are four inches high will make them more stocky. As soon as well rooted transplant to permanent location. In the field, plants are set in rows four to six feet apart with plants eight to twelve inches apart in the row. In the garden they are often set much closer. To blanch, draw earth about the plant from time to time taking care that the tops of the center shoots are not covered.

GOLDEN SELF BLANCHING. The most popular variety for market, easily blanched, very attractive, of good quality though not equal to some of the green celeries.

TRUE FRENCH-GROWN SEED. Pkt. 20 cts., $\frac{1}{2}$ oz. 90 cts., oz. \$1.65, 2 ozs. \$2.85, $\frac{1}{4}$ lb. \$5.00.

AMERICAN GROWN SEED. Seed plants grown direct from French seed. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., 2 ozs. \$1.00, $\frac{1}{4}$ lb. \$1.85.

WHITE PLUME. The earliest and most easily blanched of all varieties, very showy, of good quality. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts.

BOSTON MARKET. An old variety of superior quality; at one time the most popular variety in New England. Of low, spreading habit, forms a number of secondary heads instead of a single large one. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts.

GIANT PASCAL. A green-leaved variety which developed from the golden Self-Blanching. Very solid and crisp, of the finest quality, stringless, tender and of a peculiarly sweet, nutty flavor. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts., 2 ozs. 55 cts., $\frac{1}{4}$ lb. \$1.00.

GIANT GOLDEN HEART. A selection from the Dwarf Golden Heart. Large, solid and sweet, of a beautiful golden color. An excellent keeper. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts.

WINTER QUEEN. Of medium height, but stout, thick, and heavy, with a larger amount of heart than most other sorts. Of fine quality, more easily handled than the Giant Pascal, and an excellent keeper. One of the best for late winter use. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts.

CHIVES

CHIVES. Are a small hardy perennial plant resembling onion in appearance and grow in clusters. They are grown for the leaves, which are produced freely from early spring and give a mild onion flavor to sausages, salads, and soups. They can be easily grown in pots at a sunny window during the winter. Pkt. 15 cts., $\frac{1}{2}$ oz. 40 cts., 1 oz. 75 cts., $\frac{1}{4}$ lb. \$2.00.

WATER CRESS

WATER CRESS. Hardy plant which can be grown in a pond or along the banks of a running stream. Largely used as a garnish during the winter and early spring months. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., 1 oz. 35 cts., $\frac{1}{4}$ lb. \$1.00.

Chervil Curled

A hardy annual, used for flavoring and garnishing. It is thought by some to exceed even parsley in beauty. Seed should be sown early in the spring and when plants are well-rooted, transplant to one foot apart. The leaves will be ready for use in seven to ten weeks from planting. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

Cress, Curled or Pepper Grass

A small pungent salad plant, much liked by some with lettuce. Like all salad plants it should be grown on rich ground. Seed may be sown early in the spring, but if desired through the summer repeated sowings will be necessary. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 20 cts.

Corn Salad, Fetticus, or Lamb's Lettuce

A hardy, rapid growing plant, often used in winter as a substitute for lettuce and is sometimes cooked and used like spinach. It does not thrive in hot weather and if sown in the spring it should be very early and on extremely rich soil. It will then be ready for use in four to six weeks. It, however, succeeds best when sown in August or September. If sown in the former, it will be ready for use in the late fall. If left in the ground during winter, it should on the approach of cold weather, be protected with straw or litter. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts.



GOLDEN SELF-BLANCHING

CUCUMBER

An ounce will plant about 50 hills. $1\frac{1}{2}$ to 2 pounds to the acre.

The Cucumber requires well-enriched soil, and should not be planted until settled warm weather, in this latitude, seldom before the middle of May. Plant the early, small kinds in hills $3\frac{1}{2}$ to 4 feet apart, the larger varieties 5 to 6 feet. Make the hills broad, use 15 to 20 seeds to the hill, dropping them well apart. Cover with not over an inch of earth, and firm this well with the hoe. If the young plants are attacked by the striped bugs or other insects, dust frequently with air-slaked lime, soot or ashes mixed with road dust, taking care that too much is not used at one time. When all danger from bugs is past, thin to three plants to the hill. Give frequent shallow cultivation as long as vines will permit.

EARLY RUSSIAN. The earliest and hardiest variety. Fruit 3 to 4 inches long. Vine vigorous and productive. Pkt. 6 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

EARLY CLUSTER. Early and productive. Fruit small, dark green, borne in pairs or clusters largely near the root. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

EARLY FRAME, or SHORT GREEN. Fruit straight, smaller at the ends, bright green, a little later than the Early Cluster. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

IMPROVED WHITE SPINE. Deservedly the most popular type. Fruit uniformly large, straight and attractive; dark green, lighter at blossom end with a few white spines; flesh tender and of fine flavor. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00!

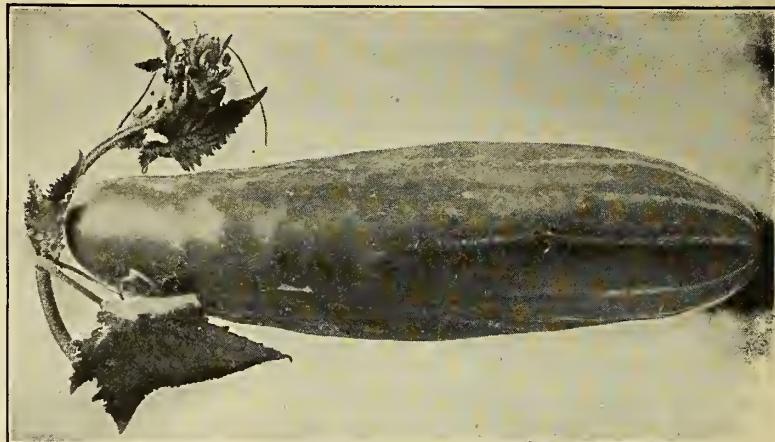
EXTRA LONG, or EVERGREEN WHITE SPINE. A distinct and superior strain of this popular type. Fruit long, cylindrical, dark green, crisp and tender. Vine productive and comes into bearing soon after the Early White Spine. Popular with market-gardeners. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

MICHOUL'S MEDIUM GREEN. Fruit thicker than White Spine and full at both ends; light green, attractive and of fine quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

EMERALD. Fruit straight, symmetrical and entirely spineless. Color very dark green which it retains until ripe; of excellent quality, attractive and popular for shipping because it holds color so long. Vine productive; season medium to late. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

DAVIS PERFECT. New. Fruit long, slim, symmetrical; rich dark green holds color until nearly ripe. Very attractive and of finest quality. One of the best for shipping. Vine especially vigorous and large. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

IMPROVED LONG GREEN. An old standard variety, very popular for home gardens but little used for market. Fruit very long, slender, very firm and crisp, uniformly dark green; makes fine pickles and is best of all when ripe for making sweet pickles. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.



DAVIS PERFECT

CUMBERLAND. A distinct variety of the White Spine type. Vine vigorous, very productive, and continues bearing much longer than most sorts. Fruit large, symmetrical, dark green, thickly set with small white spines; of best quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

JAPANESE CLIMBING. Vine very vigorous, with especially strong, grasping tendrils. Fruit of good size and quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

BOSTON PICKLING. A favorite for pickling. Pkt. 5 cts., oz. 10 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

CELERIAC, Turnip-Rooted Celery

Sow seed and treat in first stages of growth as directed for celery. Set in rows 2 feet apart and 6 inches apart in the row. As the roots only are used, no banking is necessary. When roots have reached a size of 2 inches in diameter they are ready for use. These are boiled, sliced and eaten with vinegar. To keep through winter, roots should be packed in moist sand or earth.

LARGE SMOOTH PRAGUE. An improved sort, with nearly round roots which have but few side roots. Pkt. 5 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts.

60 cts.

DANDELION

An ounce will sow 200 feet of drill.
Two pounds to the acre.

Sow early in the spring in rich soil in drills 15 to 18 inches apart, cover lightly but make the earth firm. Thin to 5 inches apart in row. Cultivate frequently through the summer. Plants ready for cutting the following spring.

CULTIVATED, or FRENCH COMMON. A greatly improved strain of the common Dandelion.

Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.25.

IMPROVED THICK-LEAVED. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts., 2 ozs. 70 cts., $\frac{1}{4}$ lb. \$1.25, lb. \$4.50.

EGG PLANT

An ounce will produce about 1,000 plants



IMPROVED WHITE SPINE

IMPROVED NEW YORK EGG PLANT

LETTUCE

An ounce will produce from 3,000 to 4,000 plants.

Lettuce thrives on nearly all soils, but because the growth should at all times be rapid to insure crispness and best flavor, the soil should be heavily enriched and well worked before planting. Lettuce being quite hardy, seed may generally be sown as soon as ground can be fitted, as, while prolonged or continued freezing will kill the plants, they are but little injured by an ordinary frost. Seed may also be sown in the hotbed in gentle heat, and the plants, if well hardened by having been often exposed to the air, may usually be set in the open ground very soon after the time suggested for sowing seed outdoors.

WHITE-SEEDED TENNISBALL, or BOSTON MARKET. An old and popular variety for forcing; heads small and compact. Not suitable for outdoor planting. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

BELMONT FORCING. Like the preceding, this is a plain-leaved variety, resembling it in general appearance, but is larger. It forms a compact head and is, like the Tennisball, almost certain to head, making it a desirable and profitable variety for forcing. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

MAY KING. A new, very hardy variety of foreign origin, which owing to its hardness, earliness and large size for a variety of this class, is coming rapidly into favor here, both for outdoor planting and for forcing. Forms compact heads nearly, if not quite, as early as White-seeded Tennisball. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

BIG BOSTON. Resembles the White-seeded Tennisball but is much larger. Though the head is larger, having but few outer leaves, the variety is used to some extent for forcing. It heads very well in early spring outdoors but does not head well in midsummer. It is, however, especially valuable for last planting, enduring cold weather conditions better than any other variety. Grown extensively in the south for shipping north in the winter. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

BLACK-SEEDED TENNISBALL. More extensively grown in New England than any other variety, both for first outdoor crop and for main crop, the medium sized heads being the size most liked by gardeners, while its compact form allows it to be grown more closely together than others. Leaves plain, thick, dark green; blanches to a rich creamy white inside. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., 1 lb. \$1.35.

NEW YORK MARKET. One of the largest varieties in cultivation. The heads are very solid with but little tendency to run to seed. It blanches itself naturally, is crisp, tender, and of excellent flavor, and always free from bitterness. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.



MAY KING

HANSON. An old variety of great merit. Forms a large, flat, cabbage-like head very slow to run to seed. The outer leaves are bright green, with veins of lighter shade, inner leaves white, usually curved and twisted at the base. A very attractive variety of excellent quality and extensively grown for home use. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

EARLY CURLLED SIMPSON. (White-seeded). An old variety, with broad, often frilled, very curly light green leaves; sweet, tender, of fine flavor. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

BLACK-SEEDED SIMPSON. Much larger than the preceding, but not so much curled. Forms a large, loose cluster of leaves rather than a head; leaves light yellowish green. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

EARLY CURLLED SILESIA. An old, standard variety, very popular for home gardens. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

BOSTON FINE CURLLED. Beautifully curled, excellent for garnishing. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

SALAMANDER. A large, compact head of good quality. Leaves light green, broad, thick, somewhat crumpled, closely overlapping so that inside they blanch to a creamy white. Withstands heat remarkably. One of the best varieties for midsummer. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

DEACON. One of the most popular summer varieties. Large solid heads of excellent quality and fine flavor and which remains in condition for use for a long time. Plant very compact with few outer leaves which are usually very smooth, thick and light green, the inner portion blanching to a beautiful cream-yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cents., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

CRISP AS ICE. A midsummer variety, surpassing all of this class in crispness, tenderness and fine flavor. Forms large, solid heads, with leaves crimped and curled, those outside being variegated dark green and bronze, the inner portion blanching to a rich creamy yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

PRIZE HEAD. A large, loose-leaved variety, which has been very popular for home use. Leaves very thin, crimped, bright green tinged with brownish red; sweet, tender and of good flavor, but not equal to Crisp as Ice. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.35.

LETTUCE—ROMAINE or COS VARIETIES

These are distinct from the ordinary lettuce, and much liked on account of their tender, crisp leaves and delicious flavor. The leaves are long and narrow and need to be tied up when they soon form solid heads and bleach snow white.

EXPRESS COS. A fine dwarf early sort requiring no tying up. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.

PARIS WHITE COS. One of the finest varieties for summer use. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.

TRIANON COS. Similar to above but grows whiter and matures earlier. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.



PARIS WHITE COS LETTUCE

MUSKMELON

An ounce will plant about 50 hills. $1\frac{1}{2}$ to 2 pounds are required for an acre.

The Muskmelon succeeds best in warm, rich soil. Plant when all danger of frost is past, in broad hills 4 to 5 feet apart, 10 or more seeds to each hill. Cover with one inch of soil and firm well with the hoe. If young plants are attacked by insects, dust them with air-slaked lime or ashes mixed with twice as much road dust. Use this frequently but sparingly, as a large quantity at one time is liable to injure the plants. When all danger from insects is past, thin to three plants to the hill.

MONTREAL NUTMEG. The fruits are of the largest size, often attaining a weight of 15 pounds. Shape nearly round, flattened at the ends. The flesh is about two inches thick, light green, and of a delicious flavor. This variety commands high prices in the Eastern markets during the Fall months. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EMERALD GEM. Small to medium size; skin deep green, generally smooth; flesh thick, rich salmon, not surpassed in richness and flavor. But few varieties are so nearly certain to produce uniformly good melons. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

ROCKY FORD. More largely grown than any other of the small or basket melons. Oval, slightly ribbed, densely covered with fine netting; flesh green; thick and of rich flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

ADMIRAL TOGO. A new variety similar in appearance to the Rocky Ford having the same dense netting and of the same shape and size, but with orange flesh. The flesh is unusually thick and of rich flavor, and the variety combines to a remarkable degree superior quality with the desired firmness for shipping. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

PAUL ROSE, or PETOSKY. The product of crossing the Osage and the Netted Gem. Resembles the latter but is a little larger, and flesh is rich orange. Very sweet and high flavored. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

IMPROVED GREEN NUTMEG. Large, round, flattened at both ends. Ribbed and covered with coarse netting, flesh thick, and of fine flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

EXTRA-EARLY HACKENSACK. Above medium size, nearly round; flesh green, a little coarse but juicy, sweet and of good flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

SURPRISE. Of medium size, oval, lightly ribbed, netted in patches; skin yellowish white, flesh deep salmon, of good quality. Vine hardy, productive and bears early. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

OSAGE, or IMPROVED MILLER'S CREAM. Of medium size, oval, dark green, shallow netting, flesh deep salmon, thick, very firm, sweet and of rich flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

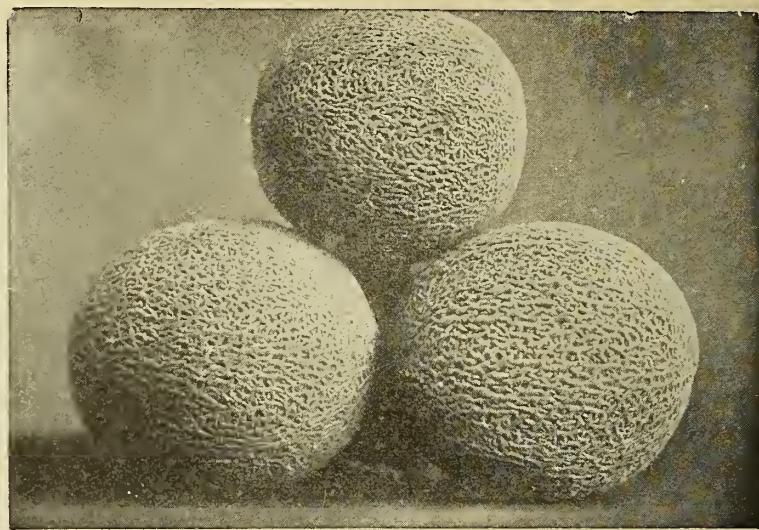
BAY VIEW. Of largest size. Long, deeply ribbed, covered with coarse netting, flesh green, thick, and of finest flavor. Vine extremely hardy. Late but safe in maturing its fruit in this latitude. The quality of Bay View warrants its careful growth. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

MELONS WATER

An ounce will plant about 30 hills, 4 pounds to the acre.

The culture of the Watermelon is mainly the same as recommended for the Muskmelon, hills should, however, be about 10 feet apart.

COLE'S EARLY. Small but very early; of fine quality and sure to mature in any latitude where melons can be grown. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.



ROCKY FORD

HARRIS' EARLIEST. A new extra-early variety, large and of exceptionally fine quality. Slightly oval, mottled in stripes of light and dark green. Flesh bright red. One of the most desirable for planting in the North. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

PHINNEY'S EARLY. A standard early variety of medium size, oval, marbled light and dark green, flesh pink, sweet and crisp. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

PEERLESS, or ICE CREAM. Of medium size, oval, dark green; flesh scarlet, very sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

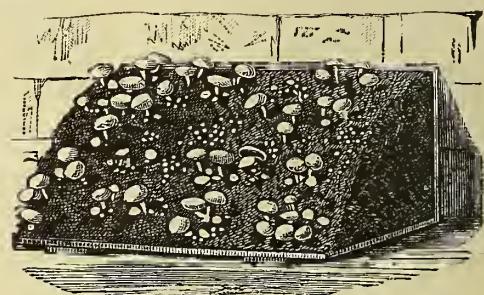
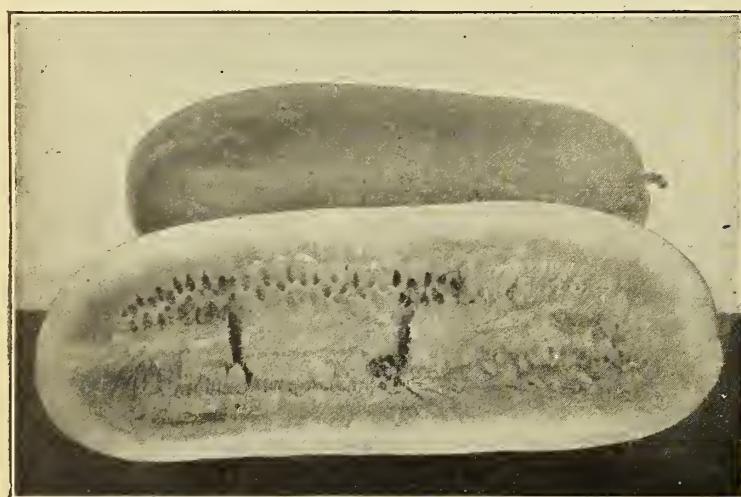
MOUNTAIN SWEET. An old favorite, early productive and of good quality. Fruit long, dark green; flesh scarlet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

SWEETHEART. Large, oval, very heavy; rind thin but firm, mottled light and very light green; flesh bright red, tender, melting and sweet. Retains its good qualities for a long time after ripening. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

CUBAN QUEEN. Large, round or slightly oval, striped light and dark green, rind thin but firm; flesh bright red, solid, crisp and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

KLECKLEY'S SWEET, or MONTE CRISTO. One of the sweetest, above medium size; dark green; rind thin; flesh bright red. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

CITRON. For preserving only. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.



MUSHROOMS

Cultural directions, to be of any value, would be too lengthy to give here but we offer the very helpful little book "Mushroom Culture and Pure Culture Spawn," which not only gives the latest methods of culture of Mushrooms but also how best to prepare them for market, and several recipes for cooking them. 15 cts., postpaid.

LAMBERT'S PURE CULTURE SPAWN. This will produce Mushrooms of a specific variety, selected with reference to size, color, and yield, and eliminates absolutely any danger of poisonous specimens. Standard bricks, weighing from $1\frac{1}{4}$ to $1\frac{1}{2}$ pounds, of the variety most largely cultivated, 25 cts., each. Postpaid 35 cts., each, 5 bricks by express, \$1.00.

ENDIVE An ounce will sow 150 feet of drill, producing from 2,000 to 2,500 plants

Endive, like lettuce, may be grown at any season, but is more generally used in the fall. For early use, sow in April, for later, until July, in drills 18 inches apart, or in beds for transplanting, plants should stand 10 to 12 inches apart in the row. When nearly full-grown, tie the outer leaves over the center to blanch the heart, or blanch with boards placed on each side as with celery.

MOSS CURLED. Of dense growth and finely curled. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

LARGE GREEN CURLED. Of larger growth, not so much curled as preceding. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

BATAVIAN BROAD LEAVED (Escarole). A variety having broad, more or less twisted and waved bright green leaves with thick, nearly white mid-ribs. The inner leaves form a fairly solid, clustering head which blanches a beautiful deep creamy white and is crisp, tender, and of fine flavor. Unsurpassed for salads. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.

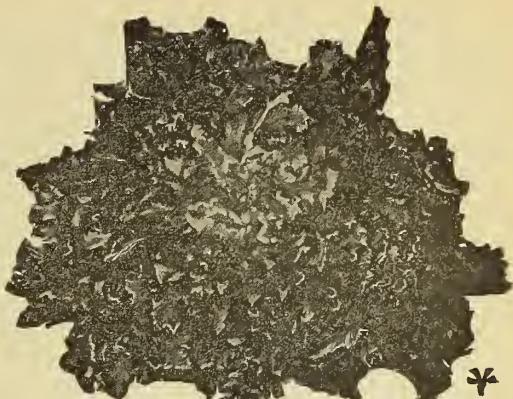
KOHLRABI

An ounce will sow about 200 feet of drill

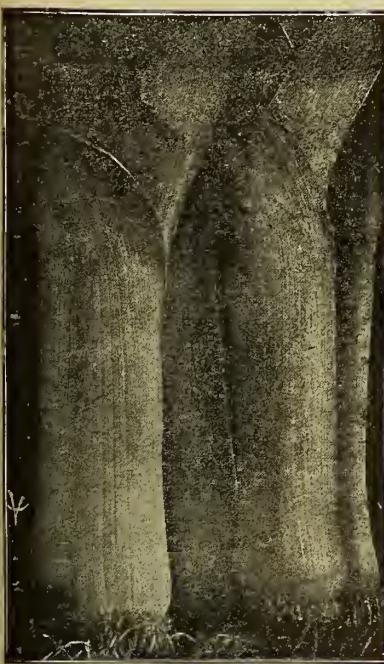
This vegetable is intermediate between the cabbage and turnip. The edible part is an enlargement of the stem and should be used when half-grown, as when full-grown it is tough and fibrous. Sow in drills 18 inches apart and thin plants to 6 or 8 inches apart.

EARLY WHITE VIENNA. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts.

EARLY PURPLE VIENNA. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts.



ENDIVE



LEEK

LEEK

Leeks require rich soil. Sow early in spring in deep drills, eighteen inches apart, but cover with but one-half inch of soil, thin plants to about eight inches apart and as they grow gradually fill the drill and draw the earth around them as with celery. Or if very tender and white leeks are desired, sow in bed and transplant when plants are six inches high into trenches six or eight inches deep and as they grow gradually fill the trench and later draw the earth around them so that it will be two or three inches above the level.

AMERICAN BROAD FLAG. A popular variety, very large. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts., 2 ozs. 35 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.00.

MARTYNIA The seed-pods when young and tender make excellent pickles, but should be gathered when less than half grown. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., $\frac{1}{4}$ lb. \$1.00.

**MUSTARD**

Used mainly for salads but is sometimes boiled for greens. Sow as early as ground can be worked in drills eighteen inches apart and one-half inch deep. If desired throughout the season successive sowings should be made about every three weeks.

WHITE, or YELLOW. The common variety. The seeds are often used to flavor pickles. Pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 25 cts.

SOUTHERN GIANT CURLED. Large, light green leaves, much crumpled at the edge. The best for salads. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts.

OKRA or GUMBO

The young seed-pods are used in soups or stewed and served like asparagus. Much esteemed in the South. In the North requires an especially warm location and probably best results would be obtained by sowing seed in the hotbed. Set plants in rows two feet or more apart and about a foot apart in the row. The seeds are a long time in germinating.

DWARF GREEN. Early and productive; best for northern cultivation. Pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 25 cts.

Herbs, Sweet or Pot, and Medicinal

	Pkt.	Oz.		Pkt.	Oz.
CARAWAY.....	\$0.05	\$0.10	SAGE.....	\$0.05	\$0.20
CATNIP.....	.05	.40	SUMMER SAVORY.....	.05	.20
CORIANDER.....	.05	.10	SWEET MARJORAM.....	.05	.20
DILL.....	.05	.15	THYME.....	.05	.40
FENNEL.....	.05	.15	ANISE.....	.05	.10
HOP SEED.....	.05	.15			

HOW CROPS GROW.

Johnson. Chemical composition, structure and life of plants. \$1.50.

OKRA

Tobacco

CONNECTICUT SEED LEAF. A hardy cigar variety, well adapted to growing in the Middle and Northern States. Pkt. 5 cts., oz. 25 cts.

HAVANA. Leaf very thin, fine texture. Much used for cigar wrappers. Pkt. 10 cts., oz. 40 cts.

Vegetable Gardening Books

GARDENING FOR PROFIT. Henderson, \$1.50.

GARDENING FOR PLEASURE. Henderson, \$1.50.

GARDENING FOR YOUNG AND OLD. Henderson, \$1.00.

CABBAGE, CAULIFLOWER, AND ALLIED VEGETABLES. Allen. A competent guide. 50 cts.

RHUBARB CULTURE. Morse. Dark forcing and field culture. 50 cts.

CELERY CULTURE. 50 cts.

ONION

An ounce will sow about 100 feet of drill. 4 to 5 pounds to the acre.

The Onion usually thrives best on old, rich land but can be profitably grown only on such as has been kept free from weeds. If stable manure is used it should be either well rotted or plowed into the soil the previous fall. As manure always contains more or less weeds many large growers use nothing but commercial fertilizer. The soil should be worked until manure or fertilizer is thoroughly mixed with it and the surface made fine and even by raking. Sow as early as ground can be prepared, in rows 12 to 14 inches apart, one-half inch deep and make soil firm. Keep free from weeds, especially at first, for if the weeds get ahead of the young plants it is almost useless to continue cultivation—the land would better be plowed and replanted with some other crop.

AILSA CRAIG. Of mammoth size, larger than the Prize-taker, oval-shaped, pale straw-colored skin; of very mild flavor. One of the best for exhibition on account of its enormous size. In England the most popular large onion. Bulbs have been grown that weighed 2½ pounds. Extra large onions can, however, be obtained only by sowing seed early in the spring in the hotbed and transplanting to the open ground when plants are of sufficient size. Seed from English Prize-winning stock. Pkt. 10 cts., ½ oz. 20 cts., oz. 35 cts., 2 ozs. 65 cts., ¼ lb. \$1.00.

YELLOW GLOBE DANVERS. Of globular form but differs from the Southport type in being slightly flattened at both top and bottom; ripens earlier and in unfavorable seasons is more nearly free from scallions. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs., 40 cts., ¼ lb. 65 cts., lb. \$2.25, 5 lbs. \$2.15 per lb.

YELLOW GLOBE DANVERS. Extra Selected. Eastern grown seed. A superior strain grown from carefully selected bulbs; of perfect form, unusually small neck, skin of rich deep color; firm and heavy and unsurpassed for shipping or storing. Pkt. 5 cts., ½ oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., ¼ lb. \$1.00, lb. \$3.00.

SOUTHPORT YELLOW GLOBE. Bulbs nearly spherical, slightly elongated; does not mature quite so early as our Selected strain of Yellow Globe Danvers; a little more inclined to grow stiff-necked on some soils or in unfavorable seasons, but when well-grown brings the highest price, especially in New York markets. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 65 cts., lb. \$2.25, 5 lbs. \$2.15 per lb.



YELLOW ONION SETS



RED WETHERSFIELD

SOUTHPORT RED GLOBE. Identical in form with the preceding; rich deep red, above medium size; an excellent keeper and one of the most attractive of all. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 65 cts., lb. \$2.25, 5 lbs. \$2.15 per lb.

SOUTHPORT WHITE GLOBE. Of true glove shape. Larger than White Portugal; keeps better and like all globular varieties a greater weight can be obtained on the same area. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., ¼ lb. 75 cts., lb. \$2.50.

WHITE PORTUGAL, or SILVERSKIN. An early white, flat variety, of medium size and mild flavor. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., ¼ lb. 75 cts., lb. \$2.50.

EXTRA-EARLY RED FLAT. The earliest red variety; of medium size. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 65 cts., lb. \$2.25.

LARGE RED WETHERSFIELD. The standard red variety. Bulb large, flattened but thick; skin deep purplish-red. The best of all for light soils. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 65 cts., lb. \$2.25, 5 lbs. \$2.15 per lb.

PRIZETAKER. Of the largest size, form nearly globular; skin thin, light straw-color. Quite certain to bottom, but is later in maturing than any of the preceding, and though fine bulbs are often obtained from seed sown in the open ground in favorable locations, the largest and finest bulbs are grown from seed sown in a hotbed and the plants set in the open ground when about six inches high. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 65 cts., lb. \$2.25.

Onion Sets

Mailing weight 2 lbs. per qt. Prices for larger quantities than here quoted given on application.

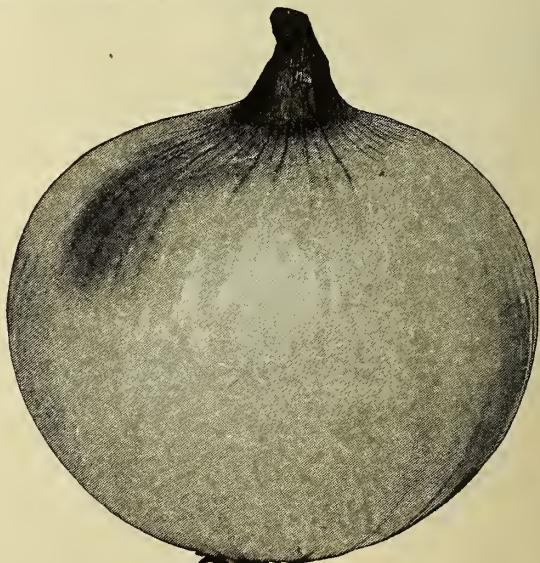
Onion Sets require rich soil and, with the exception of the Egyptian, early planting. Rows should be the same distance apart as suggested for Onions grown from seed, and sets should be planted from 2 to 4 inches apart, and only lightly covered with earth, the top of set just below the surface with any growth it may have made above. Culture same as of Onions from seed. White and yellow sets are grown from seed sown very thickly; the crop from sets is used both when half-grown and when mature. Potato Onions and Shallots are propagated by division of the large bulb into several smaller ones, the first growing as large as Onions from seed; the latter are much smaller, but are favorites with some because of their peculiar flavor and are used both in the green state and when dry. Egyptian sets are borne in clusters at the top of a tall seed-stem; once planted they will live for years but are usually treated as annuals; form a bulbous root rather than a bulb; used green and should be planted in the fall.

EITHER WHITE, or YELLOW. Qt. 20 cts., ½ pk. 60 cts., pk. \$1.00.

POTATO ONIONS. Qt. 20 cts., ½ pk. 65 cts., pk. \$1.25.

SHALLOTS. Qt. 20 cts., ½ pk. 60 cts., pk. \$1.15.

EGYPTIAN, or PERENNIAL TREE. Ready in September. Qt. 20 cts., ½ pk. 50 cts., pk. 90 cts.



YELLOW GLOBE DANVERS

PEAS

Of the early smooth varieties, 1 quart will plant 150 feet of drill. Of the wrinkled sorts, a quart will plant about 100 feet, $1\frac{1}{4}$ to $1\frac{1}{2}$ bushels will plant an acre.

Though light, warm soil is desirable for the extra-early varieties, Peas generally succeed better on that which is moderately heavy. The early smooth Peas are very hardy and may be planted as soon as frost is out of the ground and are sometimes planted in the fall. The wrinkled varieties are somewhat more tender and seed is more liable to rot if planted as early. Plant the early and dwarf varieties in drills $2\frac{1}{2}$ feet apart and 3 or 4 inches deep, but cover with but one inch of soil and fill trench gradually as plants grow. Plant the taller and later varieties in rows 3 to 4 feet apart and 5 to 6 inches deep covering as already suggested.

All prices include bags. With the exception of Alaska, First and Best, and Black-eyed Marrowfat, all varieties have wrinkled seeds.

We are pleased to report a more favorable season for growing peas and the result is prices are quite a little lower, but with practically no old stock being carried over we do not anticipate any surplus.

Extra Early Dwarf Varieties

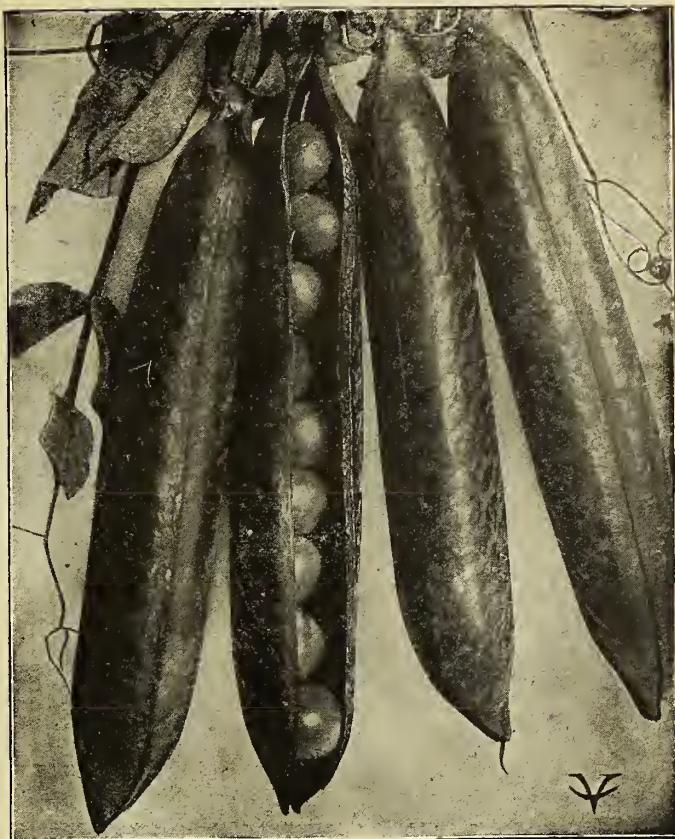
AMERICAN WONDER. A well-known and popular variety of very dwarf habit; the earliest of the dwarf varieties. Prices $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.85, bus. \$7.00.

LITTLE MARVEL. The Little Marvel Pea in size and shape all podded is very similar to the Nott's Excelsior but far more prolific. It is of exceptionally fine quality and enormously productive. The pods of this pea are about 3 to 4 inches long. It should be planted in every garden. $\frac{1}{2}$ pt. 15 cts., pt. 28 cts., qt. 40 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00, bus. \$7.50.

NOTT'S EXCELSIOR. The most popular of the dwarf varieties. Vine, larger and more productive than the American Wonder and bears earlier than Premium Gem. Prices, $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.85, bus. \$7.00.

PREMIUM GEM. An improved strain of Little Gem. Vine not quite so tall, more even in growth and more productive. Prices $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.85, bus. \$7.00.

SUTTON'S EXCELSIOR. The best of the dwarf varieties. The vine is of more vigorous growth than the Nott's Excelsior, a little taller, fully as productive and matures its crop nearly as early, while both pods and peas are decidedly larger. In quality equal to any of the preceding, all of which compare favorably with the larger and later sorts. Prices $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00, bus. \$7.50.



IMPROVED TELEPHONE

Extra Early Varieties of Taller Growth

ALASKA, or EARLIEST OF ALL. Very popular with market-gardeners due to its uniformity in ripening. Nearly the whole crop can be gathered at one picking. Vine about $2\frac{1}{2}$ feet high; bears abundantly pods which, though small, are always well filled. Price $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 45 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.40, bus. \$5.50.

FIRST AND BEST. Matures closely to Alaska, both peas and pods larger. Prices same as Alaska.

GRADUS. A remarkable variety, combining earliness with peas of largest size and best quality. Matures soon after Nott's Excelsior. Vine resembles the Telephone but is only 3 to $3\frac{1}{2}$ feet high, on rich land; productive. Pods 4 inches long, straight, slightly curved at end, light green, well filled. Price, $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00, bus. \$7.50.

THOMAS LAXTON. Vine of about the same height as the Gradus, of similar habits but much darker, harder and more productive. More attractive and better filled with peas as large and equal in quality. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00, bus. \$7.50.

Laxtonian

LAXTONIAN. The Laxtonian Pea is a Telephone Pod on a Little Gem Vine. It is an early variety of superfine quality, and taken altogether is one of the best peas for the home gardener. It does not require bushing and for that reason can be planted close. Give this pea a trial and we are convinced that you will continue to plant it. $\frac{1}{2}$ pt. 20 cts., pt. 30 cts., qt. 50 cts., 2 qts. 85 cts., $\frac{1}{2}$ pk. \$1.50, pk. \$2.50.

Second-Early Medium and Late Varieties

ADVANCER. An old popular second-early sort. Vine about $2\frac{1}{2}$ feet high, vigorous and productive. Pods of medium size, broad, well filled. Peas rather under medium size but of finest quality. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.85, bus. \$7.00.

IMPROVED STRATEGEM. Vine 24 to 28 inches, of vigorous habit, with good culture, productive. Pods $3\frac{1}{4}$ to 4 inches, broad, attractive, well-filled. Peas extra large and of finest quality. The tendency to sport has in a great measure been overcome in the improved strain which we offer. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.75, bus. \$6.50.

TELEPHONE. Extensively grown. Vine $3\frac{1}{2}$ to 4 ft. On good soil, productive. Pods large. Peas above medium size, of best quality. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00, bus. \$7.50.



LITTLE MARVEL

PEAS

SECOND, EARLY AND MEDIUM LATE VARIETIES—Continued.

ADMIRAL DEWEY. A productive variety growing $3\frac{1}{4}$ feet high, pods dark green, larger than those of any other variety and well filled with large peas of unsurpassed quality. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 40 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.25, pk. \$2.00, bus. \$7.50.

CHAMPION OF ENGLAND. Vine $4\frac{1}{2}$ to 5 feet high, productive. Pods $2\frac{3}{4}$ to 3 inches long, broad, well filled. Peas of medium size, much shriveled, of unsurpassed quality. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 60 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.75, bus. \$6.50.

BLACK-EYED MARROWFAT. An old variety. Peas large but like all smooth. Peas much inferior in quality to the wrinkled sorts. $\frac{1}{2}$ pt. 10 cts., pt. 15 cts., qt. 25 cts., 2 qts. 40 cts., $\frac{1}{2}$ pk. 75 cts., pk. \$1.25, bus. \$4.00.

YORKSHIRE HERO. Vine 26 to 30 inches, stout and branching, hardy and productive. Pods 3 to $3\frac{1}{4}$ inches long, broad, well-filled with peas of largest size, mealy, and of the richest flavor. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.75, bus. \$6.50.

EVERBEARING. In all respects very similar to, if not identical with, Yorkshire Hero. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$85, bus. \$7.00.

DWARF CHAMPION. A new variety, claimed to be equal in quality to Champion of England. Both peas and pod are considerably larger and vine is only about 2 feet high. $\frac{1}{2}$ pt. 12 cts., pt. 20 cts., qt. 35 cts., 2 qts. 65 cts., $\frac{1}{2}$ pk. \$1.00, pk. \$1.85, bus. \$7.00.

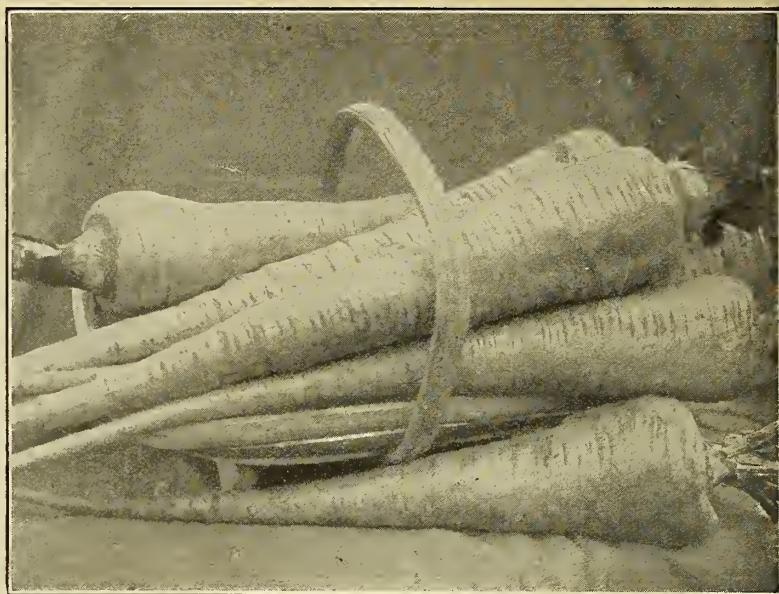
KALE OR BORECOLE

An Ounce will Produce 2,000 Plants

For early use, sow in May and transplant in June, and treat generally as for cabbage.

DWARF CURLED SCOTCH OR GERMAN GREENS

One of the best plants grown for greens. This is a finely curled, low growing variety, the leaves of which when properly cooked make very palatable greens. The plant is very hardy, the leaves are long and of an attractive bright green color. This sort is also very often used for garnishing. Pkt. 5 cts., oz. 10 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts., 10 lbs. or over 60 cts. per lb.



HOLLOW CROWN PARSNIP

PARSNIP

An ounce will sow 100 feet of drill; 6 pounds are required for an acre.

The Parsnip thrives on any soil which is deep, mellow and moderately rich, but best on that which is rather light or sandy. Avoid the use of fresh manure, as roots are more inclined to be coarse, spongy and ill-shaped. Seed germinates slowly, should be sown early and immediately after ground is prepared—that is, before the soil has become dry. Sow in rows 18 inches apart, cover with one-half inch of soil and make firm by rolling or with back of hoe. Thin plants to three inches or more apart.

HOLLOW CROWN

Roots of medium length, thicker at the top or shoulder than the following variety; succeeds better on shallow or stiff soils; crown slightly depressed; does not, on this account, keep so well in the ground through the winter as the Arlington Long Smooth, but is more easily harvested and more extensively grown. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

ARLINGTON LONG SMOOTH

Roots very long and smooth with full crown; desirable for deep soils and owing to the full crown, is less liable to rot if left in the ground through the winter than the Hollow Crown. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 75 cts.

PARSLEY

One ounce will sow 100 feet of drill.

Culture — Parsley thrives in rich, mellow soil and, owing to the very slow germination of seed, succeeds best when seed is sown as early in the spring as ground can be worked. Sow in drills, one-half inch deep, 14 to 16 inches apart, and when well up, thin plants to 8 inches. It may be cut when 3 or 4 inches high, and if soil is of the required richness, will afford several cuttings during the season. The Moss Curled is perhaps slightly more curled, while the Double Curled is claimed by some to be the more productive of leaves and to better withstand dry weather.

CHAMPION MOSS CURLED

This is a prize winning English variety, very distinct. It makes remarkably handsome, compact plants and its leaves have the appearance of finely curled moss. The plant is quite hardy and very slow to run to seed. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{2}$ lb. 40 cts., 1 lb. \$1.25.

DOUBLE CURLED. Plants compact, very curly and finely cut; bright green color. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., 1 lb. \$1.25.

TRIPLE CURLED. A dwarf growing plant but very curly. Pkt. 5 cts., oz. 15 cts., 2 oz. 25 cts., $\frac{1}{4}$ lb. 40 cts., 1 lb. \$1.25.



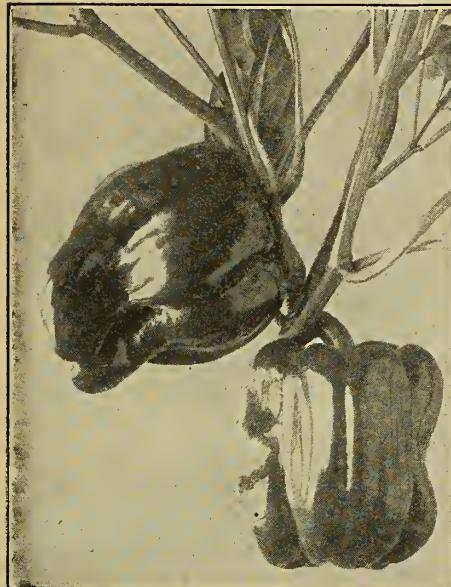
PARSLEY

PEPPERS

An ounce will produce from 1,500 to 2,000 plants.

The Pepper requires deep, rich, warm soil. Sow in hotbed or in the house early in April and transplant to open ground about the first of June. Set in rows $2\frac{1}{2}$ feet apart and about 2 feet apart in the row. A liberal application of any fertilizer rich in nitrogen, made when plants are set in the open ground, or at first hoeing, will greatly assist the growth of the plants, increase the productiveness and improve the quality of the fruit.

CORAL GEM BOUQUET. The best of the small sorts. Its small red pods are so thickly set as to give it the appearance of a bouquet. Very ornamental, as well as useful. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., oz. 40 cts., $\frac{1}{4}$ lb. \$1.00.



BELL PEPPERS

SWEET MOUNTAIN. Fruit very large, often 8 inches long by 2 in. diameter. Flesh thick, sweet and mild. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

RUBY KING. Large. Four to six inches long, symmetrical, very mild and sweet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

SQUASH, or TOMATO-SHAPED. Fruit flat or tomato-shaped, and somewhat ribbed, flesh thick and slightly more pungent than other large sorts, early and sure to mature. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

LONG RED CAYENNE. Fruit very slim, pointed, about 4 inches long, and when ripe, bright red. Extremely pungent. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

NEAPOLITAN. A great market variety on account of its earliness and productiveness. Grows about $3\frac{1}{2}$ inches long and is remarkably sweet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

RED CHILI. Used for making pepper-sauce. Pods bright red, slender, about 2 inches long and very pungent. Requires a long season; seed should be sown early in hotbed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 75 cts.

SCHELL'S NEW QUALITY PEPPER. The originators of this pepper write the following: "It is a very attractive pepper, averaging $5\frac{1}{2}$ inches in length and $3\frac{1}{2}$ inches wide at the stem and $3\frac{1}{2}$ inches at the other end. It is very productive and is especially valuable for the market gardener. The plant has a very heavy and dense foliage, protecting the peppers from the first early frosts. It is very sweet, (almost as sweet as an apple). Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., oz. 60 cts., $\frac{1}{4}$ lb. \$2.00

PUMPKIN

One ounce will plant 12 to 18 hills

SMALL SUGAR. The popular variety in New England for pies; fine-grained and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

LARGE CHEESE, or KENTUCKY FIELD. Shape flat, skin of a rich cream color when ripe, flesh tender and of fine quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

MAMMOTH TOURS. One of the largest in cultivation, good for feeding stock. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

CONNECTICUT FIELD. The standard variety for feeding stock. Pkt. 5 cts., $\frac{1}{4}$ lb. 15 cts., lb. 50 cts.

GOLDEN OBLONG. Pumpkins from 15 to 20 inches long and 8 to 10 inches in diameter; skin rich golden yellow, thin, but tough. Flesh light golden yellow, of fine quality. Keeps nearly as well as the hard-shell squashes. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

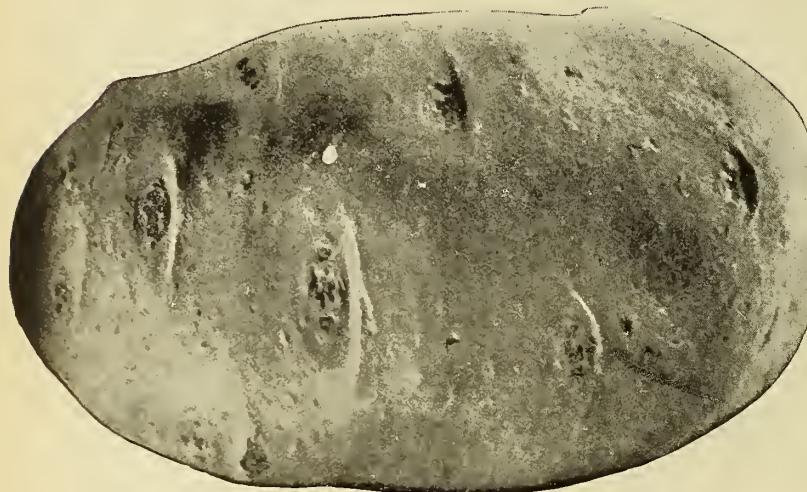
QUAKER PIE. Fruits broad, pear-shaped to slightly oval; skin rich cream-buff; flesh, fine-grained and of rich flavor. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts.

JUMBO, or KING OF THE MAMMOTHS. The largest of all Pumpkins. Skin orange-salmon, flesh bright yellow, very thick, fine grained and of excellent quality for pies. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.



GOLDEN OBLONG PUMPKINS

SEED POTATOES GROWN FOR SEED BY SEED GROWERS IN AROOSTOOK COUNTY, MAINE



EARLY SIX WEEKS POTATO

All of our seed stock is grown for us by one of the most reliable growers in Aroostock County, Maine. The seed stock is carefully selected, free from rot and scab and also treated with Formaldehyde and Corrosive Sublimate. Our seed potatoes are also shipped in new burlap bags for which we make no charge. The department of agriculture tells us that potato disease has been transmitted by the use of old second hand bags. We have been using new bags for several years. Stock that has had the careful treatment that ours has, is well worth the difference in price over common cooking stock. (Parties wishing for large quantities, will do well in writing us for special price.) Potatoes will be shipped as soon in the Spring as the weather will permit of their going in ordinary cars without freezing. It pays to change your seed stock each season. We wish our customers would give a first and possibly a second choice in case we should be out of varieties wanted.

IRISH COBBLER

An early, white-skinned variety, very short, thick, inclining to round. This is yearly increasing in popularity for the early market. But few varieties, if any combine earliness, size and production in as great a degree. The crop is ready for market about ten days earlier than the Early Rose; tubers are uniformly larger and in average production of large crops it is not equalled by any of the extra early varieties nor greatly surpassed in yield by any of the main crop varieties. The vine is very stocky and vigorous, not as liable to be affected with blight or to suffer by drought as most others. No other of the early varieties is as dependable as this, and is so certain to produce a crop. Owing to the fact that the Cobbler withstood the severe drought of last season better than other varieties it is quite probable that there will be a larger demand than usual for it this season. Therefore early orders are advisable. Pk. 65 cts., bus. \$2.15, bbl. \$5.50.

GOLD COIN

Productive and of unsurpassed quality. Very uniform in size, never over-large, but few small tubers. Form oblong, rather broad and thick. Skin almost white with just enough of a light golden tinge to make it distinct from the white skinned varieties, and having that rich russet appearance generally considered an indication of good quality. Vine of strong, vigorous growth, not easily affected with blight. Pk. 60 cts., bus. \$2.10, bbl. \$5.25.

DELAWARE. Succeeds well in all soils. A valuable combination of size, yield and quality. White throughout. Shape oblong. Pk. 60 cts., bus. \$2.10, bbl. \$5.25.

BEAUTY OF HEBRON. One of the best early varieties. color, pink and white mottled, smooth skin, an old standard. Pkt. 65 cts., bus. \$2.15, bbl. \$5.50.

NEW QUEEN. Similar to the above but considered by many as being a better cooker. Next to Cobbler this is the best early kind for general crop. Pk. 65 cts., bus. \$2.15, bbl. \$5.50.

EARLY HARVEST. An early white skinned variety of finest quality. A vigorous grower and great yielder. Said to bear shipping better in hot weather than most kinds. Pk. 65 cts., bus. \$2.15, bbl. \$5.50.

EARLY ROSE. The standard early variety; color red; medium size, not inclined to grow large but a good seller in any market. Pk. 65 cts., bus. \$2.15, bbl. \$5.50.

EARLY SIX WEEKS. An extra early variety, of good quality, cooking well as soon as it attains marketable size. In size, medium to large; color, light red or rose; form, round oblong, resembling the Ohio, and having the specks peculiar to the Ohio type. Keeps well. A good yielder. Pk. 65 cts., bus. \$2.15, bbl. \$5.50.

BURPEE'S EXTRA EARLY. Of the finest quality and good size. Tuber, oblong, white or very pale brownish skin; few and shallow eyes. Pk. 65 cts., bus. \$2.15, bbl. \$5.75.

CARMEN NO. 3. A handsome round, white variety of the best quality; large; almost no small tubers. Claimed by the introducer to outyield any potato of its class. Vines large and vigorous, not troubled by bugs or blight as much as those of other sorts. Pk. 60 cts., bus. \$2.10, bbl. \$5.25.

NORCROSS. A white-skinned variety which through the result of crossing two early varieties—Early Rose and Beauty of Hebron—matures at about the same time as the Green Mountain and is a worthy rival of that popular variety in productiveness. The vine is very vigorous and hardy and resist, blight better than most of the white varieties. The tubers are produced close together in the hill, are short and thick, large, smooth and of fine quality. In a trial of the Norcross in Maine soon after its introduction, an acre yielded 550 bushels of fine marketable potatoes. Since its introduction the Norcross has steadily increased in popularity, due to its great productiveness and freedom from blight. Pk. 60 cts., bus. \$2.10, bbl. \$5.25.

GREEN MOUNTAIN. A white skinned variety of flat, oval form, smooth and attractive. Ripens slowly and is a good keeper. Quality excellent when well grown. This variety has been growing in popularity and is now the leader of this class, if not the most popular of all varieties for general crop Pk. 60 cts., bus. \$2.10, bbl. \$5.00.

RADISH

An ounce will sow 100 feet of drill

Radishes are now grown the entire year, and may be sown when desired in hotbeds with moderate heat, either in rows 6 inches apart or broadcast. Soil should be light and rich, preferably new soil and fine rotted turf and commercial fertilizer. Seed may be sown outside very early, as soon as ground can be worked, in rows 6 to 12 inches apart, as desired, and one-half inch deep. For our own use, we prefer that plants shall be thick, commencing to use roots when twice the size of a large pea and only thinning when plants are so crowded as to prevent the formation of roots of a size suitable for use. Grown in this way and used from the size noted to that of a small marble roots are tender and crisp and never have the thick skin, so generally a feature of those found in our markets. If desired for some time, seed should be sown at intervals of two to three weeks. As with the hotbed, soil should be light and rich, if possible, that which has recently been in grass. Avoid the use of both fresh manure and soil on which either radishes, turnips, or cabbage were grown the previous year. Commercial fertilizers are much preferable and especially nitrate of soda valuable in stimulating rapid growth, without which radishes are tough and stringy.

Prices of all varieties except where noted, pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., 1/4 lb. 25 cts., 1 lb. 75cts., 5 lbs. or over at 60 cts. per lb.

EARLY SCARLET TURNIP. A small, round variety, with small tops; quick grower. Popular for forcing and outdoors. Deep scarlet.

EARLY SCARLET TURNIP, WHITE-TIPPED. Root nearly round, slightly flattened at bottom, bright scarlet with tip of clear white, early and attractive; suitable for forcing and outside planting.

WHITE ICICLE. The earliest pure white long summer radish of most excellent quality. Roots when maturer are 5 to 6 inches long by about 1/2 inch in diameter. One of the best outdoor summer radishes. Pkt. 5 cts., oz. 10 cts., 1/4 lb. 30 cts., lb. \$1.00.

NON PLUS ULTRA, or DEEP SCARLET FORCING. One of the earliest; tops very small, especially suited for forcing. Color deep rich red, form globular.

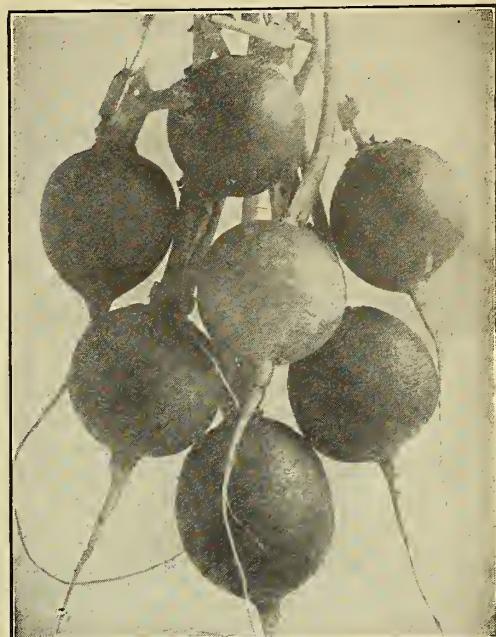
SCARLET GLOBE. Root globular, or slightly olive-shaped. Brilliant red, which it holds long after pulling. Though top is somewhat larger than that of some forcing varieties it is more largely used for forcing than any other because less liable to be pithy and is also for this reason the popular variety with market-gardeners for outdoor planting. We offer a proved and unsurpassed stock.

CRIMSON GIANT. An early but large, round or slightly globular radish adapted for either forcing or outdoor cultivation. While it grows much larger than other forcing varieties it does not become pithy under glass, nor outdoors even when it is twice as large and older. Beautiful crimson-carmine, attractive and of fine quality.

FRENCH BREAKFAST. A stump-rooted radish, about 3 inches long. Bright scarlet, tipped white. An old favorite for home garden.

EARLY LONG SCARLET, SHORT-TOP. Once the most popular radish, but has been largely displaced by the round varieties. 6 to 8 inches long ready to pull in twenty-five to thirty days from sowing.

WHITE STRASBURG. A fine summer variety, growing about 4 inches long and 2 inches thick. Pure white.



SCARLET GLOBE

EARLY WHITE GIANT STUTTGART. Root large, clear white, often 4 inches in diameter, does not become pithy until very late. Those not used for summer radish can be stored for winter use. Pkt. 5 cts., oz. 10 cts., 1/4 lb. 30 cts., lb. \$1.00.

LONG BLACK SPANISH WINTER. One of the hardest and best for winter use.

ROUND BLACK SPANISH. White flesh with black skin.

CHINESE ROSE WINTER. A popular winter variety, root cylindrical, slightly larger at the bottom, terminating abruptly. Grows about one-half inch above ground. Color of upper part scarlet, shading to rose in lower portion. 6 to 8 inches long.

SALSIFY OR VEGETABLE OYSTER

An ounce will sow 50 feet of drill

Sow early and deeper than parsnip, otherwise culture is the same and like that, roots, if desired, may be left in the ground through the winter, but should be dug very early in the spring, as they deteriorate rapidly after growth commences.

MAMMOTH SANDWICH ISLAND. Larger, of stronger growth, and less liable to grow prongy than the old Long White. Pkt. 5 cts., oz. 20 cts., 2 ozs. 35 cts., 1/4 lb. 65 cts., lb. \$2.25.

SPINACH

An ounce will sow 50 feet of drill, 14 to 16 pounds to the acre.

Spinach thrives only on rich land—the richer the better. For earliest use, sow in August or September, in drills 12 to 14 inches apart, covering seed one inch. Plants should stand 2 inches or more apart. Protect with a light covering of leaves or straw, which should be removed at first signs of a new growth in spring. For later or early summer use, sow as early as ground can be worked in the spring. The entire crop should be cut before hot weather, as after that the leaves become tough, stringy and of poor flavor. All at uniform prices, unless otherwise noted. Pkt. 5 cts., oz. 10 cts., 1/4 lb. 15 cts., lb. 35 cts., 5 lbs. \$1.

ROUND THICK-LEAVED. Leaves large, thick, fleshy and slightly crumpled. Extensively grown and used for both spring and fall sowing.

EARLY GIANT THICK-LEAVED. Leaves very large and thick, deep green, attaining a size suitable for use earlier than the preceding and plant grows to a larger size before running to seed.

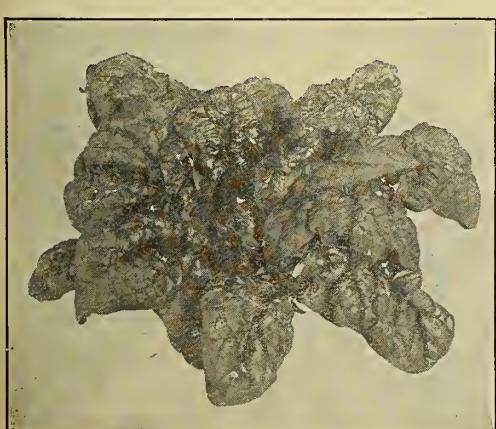
LONG STANDING. A variety which matures early and remains in condition for use longer than most others. Leaves smooth, rich dark green.

VICTORIA. Leaves large, thick, very dark green, slightly curled in the center. A little later than Long Standing, but surpasses it in the desirable feature of remaining in condition for use a long time. Especially desirable for spring sowing.

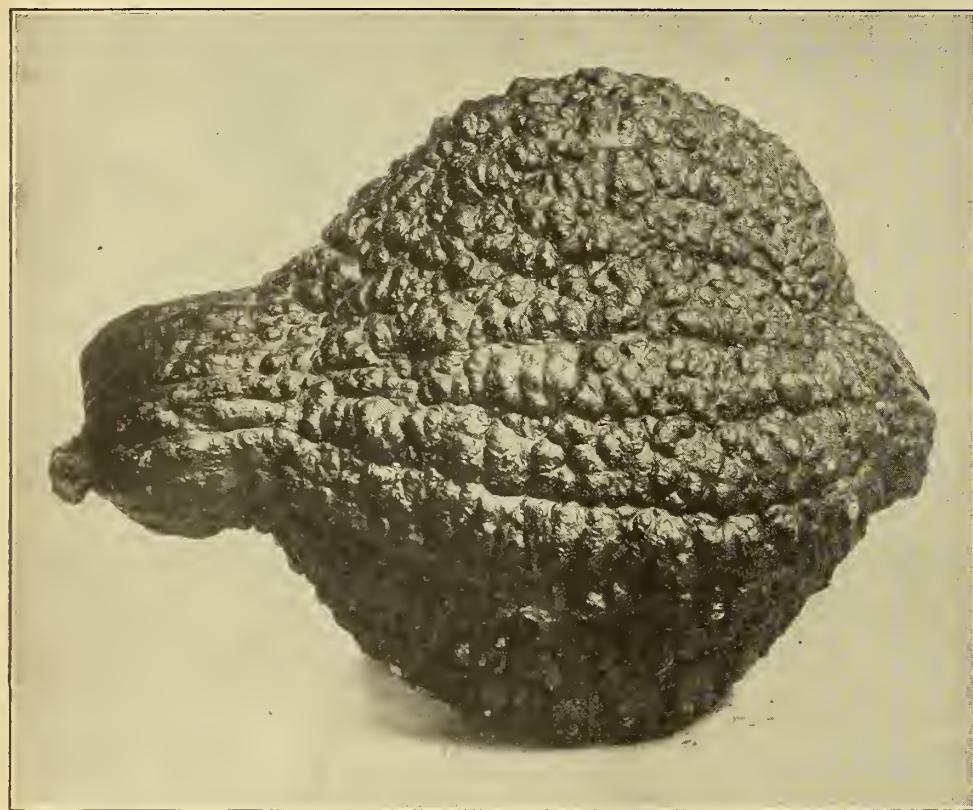
SAVOY-LEAVED, or BLOOMSDALE. The earliest variety and used almost entirely for fall sowing, as it runs quickly to seed in warm weather. Leaves of medium size, dark green, pointed and crimped.

LONG SEASON. A new variety claimed to surpass all others in its ability to withstand hot weather without running to seed. Leaves very dark green, much crumpled, thick, tender and succulent.

NEW ZEALAND. This is a plant of a different genus, entirely distinct from the common Spinach. It makes a much larger plant, thrives during hot weather, grows on all soil, rich or poor, and may be cut nearly all summer, new shoots growing when others are cut. As it takes a long time for the seed to germinate, it is preferable to sow in heat and transplant as plants will then reach a size from which the shoots can be cut much earlier than if sown in the open ground, but as the plant is hardy or half-hardy, and it requires much less care, seed is probably more often sown outdoors. Plants should stand 3 feet apart each way. Pkt. 5 cts., oz. 10 cts., 2 ozs. 18 cts., 1/4 lb. 30 cts.



EARLY GIANT THICK-LEAVED SPINACH



The above illustration is from a photograph of a Green Hubbard Squash grown in 1913, by Chas. Greenwood from our seed, weight $41\frac{1}{4}$ pounds.

GOLDEN BRONZE. A cross of the Bay State and Boston Marrow. In form the same as the last-named, with stem and blossom end precisely like that variety; also, having the peculiar wrinkled appearance of the skin like the Boston Marrow. Very uniform in size, and weighs about nine pounds. Skin dark grayish green with bronze on upper surface when ripe. Flesh bright yellow, fine grained, very sweet and of fine flavor. Matures early but keeps well, and the vine is very productive. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

MAMMOTH CHILI. The largest variety, attaining under high cultivation an enormous size. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

PROLIFIC MARROW (Dunlap's). The earliest fall variety, from a week to ten days earlier than any other Marrow. Color deep orange. Skin considerably pitted. Not so thick-meated as the Orange Marrow, nor quite equal in quality, but especially desirable on account of its earliness, and also because it is very prolific. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

ORANGE MARROW. An early variety, much like the Prolific Marrow in color and pitting but is more nearly round, later, much thicker-meated, and of better quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

BOSTON MARROW. This grows larger than either of the preceding, but is not of so deep color. Skin thin, yellow, with pinkish tint. Desirable for pies, not so dry as the Hubbard. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

ESSEX HYBRID. A cross of the Hubbard and Old Turban, partaking somewhat of the features of both. Like the Hubbard, it is hard-shelled. In color it is like the Turban, but greatly improved in form. Flesh thick, solid and of good quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

THE WARREN has a shell generally harder and thicker than the Essex Hybrid and the color is a deeper and richer orange while the quality is decidedly better. The Warren is now grown very extensively by market gardeners. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

BAY STATE. Similar in shape to the Essex Hybrid, shell slate-colored and harder, and flesh is drier than of that variety. Very solid and of fine flavor. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

DELICIOUS. A fall and winter variety. Color usually dark green but sometimes lighter in color and mottled, shell moderately hard but very thin. Flesh thick, very fine grained, sweet and of finest flavor. Even when not quite mature is in condition for use and of good flavor. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.40.

GOLDEN HUBBARD. A distinct sort, of the shape and general character of the Hubbard, but a little smaller, earlier to mature, and a rich orange-red instead of the dark olive-green of the old Hubbard, while the flesh which is thick, is a little deeper colored, of fully as good quality, fine grained and dry. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

SQUASH

An ounce of small seeded varieties will plant 30 to 40 hills; of the larger-seeded varieties, 12 to 15 hills.

The Squash is very tender and should not be planted until all danger of frost and cold nights are passed. It thrives best in warm soil which can hardly be made too rich; manure should be worked well into the soil over the entire area, and hills should have a liberal quantity of that which is well rotted. To avoid borers it is more or less the custom to plant as late as possible and is often done as late as the middle of June; in such case, an application of commercial fertilizer or nitrate of soda greatly hastens the first growth. The early bush varieties are generally planted in hills about 5 feet apart and the running varieties about 10. Thin to three plants to the hill.

HUBBARD. A well-known and favorite winter variety more largely grown than any other. We offer a choice strain, considered by some of our customers to be superior to the popular Chicago Hubbard. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

CHICAGO, or WARTED HUBBARD. A selection of the Hubbard, with thickly warted shell. Equal in quality to that and generally considered to be of more attractive appearance. Of this also we offer a carefully selected strain unsurpassed by any we have ever seen. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

MAMMOTH WHITE BUSH SCALLOP. An improvement on the old variety; larger, pure white and superior in quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 85 cts.

EARLY SUMMER CROOKNECK. For early planting the Crookneck type is used in New England to almost the exclusion of any other. This, while much smaller than the Mammoth Crookneck, is yet largely grown, many considering it of better flavor. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

MAMMOTH SUMMER CROOKNECK. Vine larger and of more vigorous growth than the Summer Crookneck and fruit is twice as large, and deeper colored. Its large size and attractive appearance have made it popular with market-gardeners. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.

ITALIAN VEGETABLE MARROW. Vines of bush habit producing large much elongated fruits. Dark green at first but becoming marbled with yellow as they mature. The young fruits when fried in oil constitute a vegetable delicacy very popular. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1.00.

FAXON. A very desirable variety for the home garden, very productive, of medium size, (five or six pounds), fine grained, dry, sweet, a good keeper, uniform in shape, but varied in color. This variation in color is a distinct feature of the squash. Pkt. 5 cts., oz. 12 cts., 2 ozs. 30 cts., $\frac{1}{4}$ lb. 35 cts., lb. \$1.00.



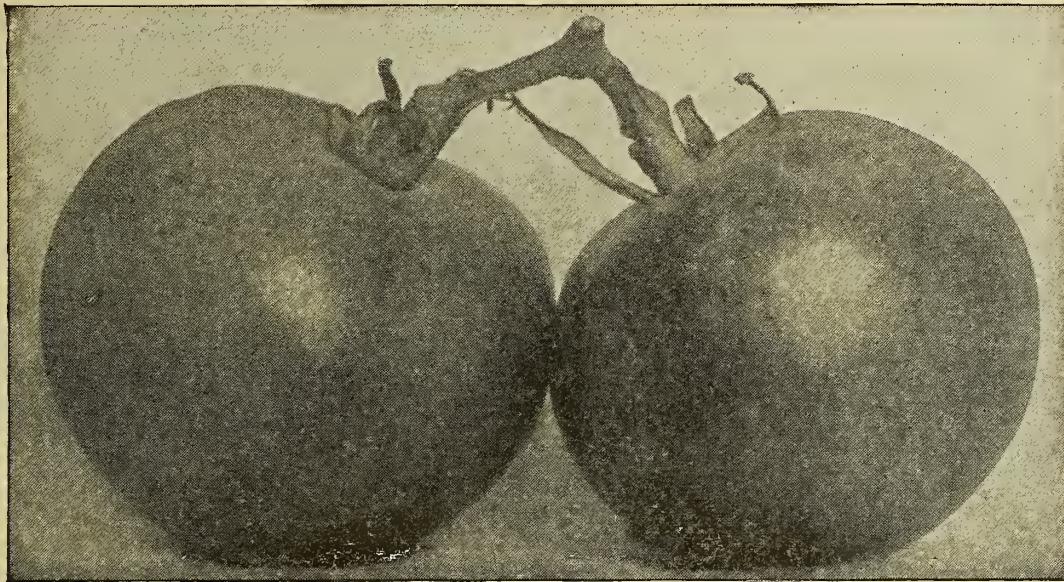
DELICIOUS

TOMATO

An ounce will produce about 2,000 plants

The Tomato succeeds best in light, warm soil, of medium fertility. Strong and rich soil tends to an overgrowth of vine, and if such is the only available soil, the vines would better be trained to stakes and pruned. And this method is an excellent one for any soil, as the fruits kept from the ground by pruning, are more open to the sun and ripen earlier, and the vitality, otherwise exhausted in unnecessary growth, is utilized in forming fruits of larger size, more nearly perfect in shape and of better quality. If this plan is adopted, select, when plant is about 10 inches high, the strongest branch and pinch off all others except this and the main stem. Care should be taken that the fruiting stems are not pinched off. Such, however, can soon be distinguished,

as the buds form early. As the two stems grow, they should be tied at intervals of 8 or 10 inches to a stake driven deeply into the ground and which should be at least 6 feet high, as all varieties, except those of dwarf habit, will grow about as tall as this, and the most vigorous often much taller. The side branches, which continue to start should be trimmed off. Seed should be sown in the hotbed or in the house in boxes, from six to eight weeks before time to set plants in the open ground, which, in this latitude is usually close to the first of June. When the plants have attained four leaves, transplant into the cold-frame, or, if seeds were sown in the house, into shallow boxes, allowing about four inches between the plants. Strong, stocky plants at time of setting can be obtained only by an unchecked growth, especially in the first stages, and plenty of air at all times. The dwarf sorts should be set in rows about 3½ feet apart, and 2½ feet apart in the row; the stronger growing varieties in rows 4 to 5 feet apart and at a proportionate distance in the row, unless intended to be staked and pruned, when they may be set somewhat closer.



BEAUTY

EARLY DETROIT. This is considered the largest and best of the purple varieties. Vine is vigorous and very productive, fruits are purplish pink, smooth, uniform in size and are nearly globe shape. Pkt. 5 cts., ½ oz. 20 cts., oz. 35 cts., 2 ozs. 60 cts., ¼ lb. \$1.00.

PONDEROSA. This is one of the largest smooth tomatoes. Color, deep purple. The fruit is exceptionally solid having but few seeds and is quite free from acid. It is also an ideal variety for shipping. Pkt. 5 cts., ½ oz. 30 cts., oz. 50 cts., ¼ lb. \$1.50.

MATCHLESS. A large, smooth, bright red variety of excellent flavor ripening well to the stem. Used in the east to quite an extent for main crop. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., ¼ lb. 75 cts.

SPARKS' EARLIANA. A deep red tomato. The vines are compact in growth, with short, close-jointed branches. This is an extra early tomato and the best so far produced. Very productive. Fruit fair size and firm. In test it ripened fruit in 108 days from date of sowing seed. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

CHALK'S EARLY JEWEL. A second or medium early sort. Later than Earliana. Vines vigorous and productive. Fruit solid and without hard core. Color bright scarlet. A sort having great merit. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

ACME. Vine hardy and productive. Fruit in clusters of four or five, round, smooth and of good size; flesh solid and of excellent flavor. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

BEAUTY. Vines large, vigorous and heavy bearers; fruit large, uniform in size, very smooth, and excellent flavor; color purplish pink. The best purple sort. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

STONE. Vines vigorous and productive; fruit large, smooth, deep red in color, and heavy. The best all around variety, where earliness is not important. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

PERFECTION. A smooth, blood red tomato. Ripens with Acme, and a week or ten days earlier than the Stone. A desirable sort for gardeners and canners who require a red tomato. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

LIVINGSTON'S GLOBE. A large, purplish pink, globe-shaped or very nearly round tomato of excellent quality. Vine very vigorous and productive. Fruits rather uneven in size but very smooth and mature a little earlier than most main crop varieties. Pkt. 10 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

DWARF CHAMPION. Sometimes sold as the "Tree Tomato." A second early, purplish pink variety, especially desirable where garden space is limited. Vine about two feet high, vigorous, upright and compact growing

Fruits medium sized, exceptionally smooth and of very good quality. Our stock is a very superior strain with more even, smoother fruit than the original. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

DWARF STONE. Vine dwarf but vigorous and productive. While maturing with the later sorts the bright red fruits of good color, exceedingly smooth and very solid. We consider this the best of the large fruited dwarf tomatoes. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

IMPERIAL. Fruit large and very attractive, resembling the Beauty: is not quite so large, but ripens a little earlier, is always smooth and not surpassed in quality. Vine vigorous and remarkably productive. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., ¼ lb. 75 cts.

BONNY BEST. This tomato has been tested and found eight to ten days earlier than the Chalk's Early Jewel and ripens about with the Earliana. Very strong grower and the fruit is uniform and smooth; ripens evenly all over, excellent shipper. Pkt. 10 cts., ½ oz. 20 cts., oz. 35 cts.

COMET. Fruit medium size, scarlet. The heaviest yielder of the greenhouse sorts. Pkt. 15 cts., ½ oz. 30 cts., oz. 50 cts.

JUNE PINK. An extra early, purplish pink tomato similar to the popular scarlet fruited Earliana in growth of vine, shape and size of fruits and time of maturing. This is a variety of exceptional value to market gardeners who want an early, purplish pink tomato, either for home market or to ship: also desirable for planting under glass. Pkt. 10 cts., ½ oz. 20 cts., oz. 35 cts. 2 ozs. 60 cts., ¼ lb. \$1.10

GOLDEN QUEEN. A very attractive variety. Fruit large, smooth, solid and we think of richer flavor than any of the standard varieties. Should be more largely grown for home use. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts

RED PEAR. Fruit bright red, rather small, distinctly pear-shaped; of rich flavor and used largely for preserving. The stock we offer is the true pear-shaped, not the large red plum often sold for it. Pkt. 5 cts.

YELLOW PEAR. Identical with Red Pear, except in color. Clear rich yellow. Pkt. 5 cts.

YELLOW PLUM. Small, plum-shaped fruit of rich flavor. Desirable for preserving and pickling. Pkt. 5 cts.

YELLOW HUSK, STRAWBERRY, or GROUND CHERRY. Fruit about the size of a small cherry, borne in husks; of very rich flavor; used only for preserves. Plant also distinct. Pkt. 5 cts.

TURNIP

An ounce will sow 150 feet of drill. If sown in drills one pound is required for an acre; if sown broadcast less seed is sufficient if sown evenly.

Turnips thrive in well-enriched, medium to light soil, succeeding best on land that was shorty before in grass, enriched at time of sowing with a liberal application of commercial fertilizer. They should not be grown on the same land two years in succession nor should they follow a crop of cabbage or radish. For early use seed should be sown as soon as ground can be prepared so that the roots will be of sufficient size before hot weather which makes them tough and stringy. At best, early turnips are not very satisfactory. The main need for early varieties is for especially late planting, while for a long time it was held that July 25 was the latest date at which Turnips could profitably be sown, more seed is now sown after that than before, and good roots are often obtained from seed sown as late as September 1. The roots are much sweeter if they do not attain their size until after several hard frosts. The above regarding the time of sowing applies only to the English or common Turnips; the Swedes or Rutabagas, requiring a longer season, should be sown not later than July 15. The rows of the English varieties should be from 1½ to 2 feet apart and plants thinned to 4 to 7 inches, according to variety and its top-growth. These varieties are often sown broadcast and too often too much seed is used; a half-pound is sufficient for an acre if sown evenly. The Swedish varieties require more space, rows should be at least 2½ feet apart and plants should not be nearer than 10 inches. Seed of this class should never be sown broadcast.

EARLY SNOWBALL. Pure white, round of medium size. Ready for the table six weeks after planting. Of fine quality. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

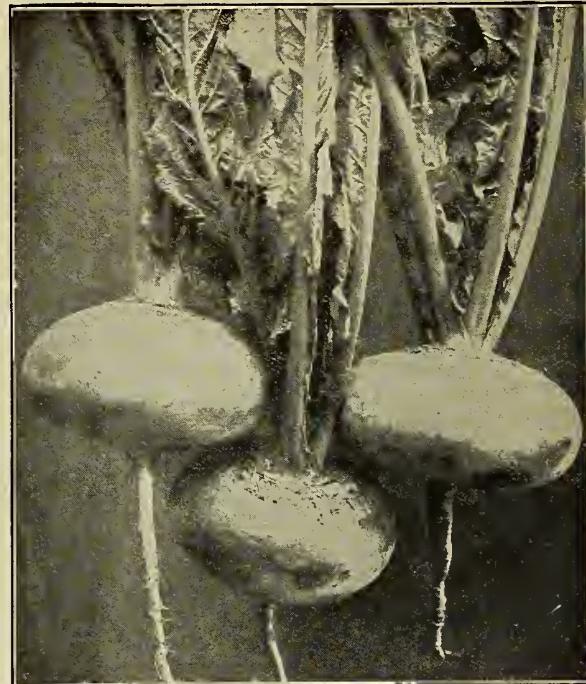
EARLY WHITE MILAN. Roots flat, smooth and symmetrical, pure white. Top very small, upright, and compact, permitting close planting. The earliest and much the best of any extra-early white variety. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 25 cts., lb. 90 cts.

EARLY PURPLE-TOP MILAN. Differs from the preceding in that the roots are not quite so thick and are purple on top. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 25 cts., lb. 90 cts.

EARLY PURPLE-TOP FLAT. A well-known variety and very extensively grown. Roots smooth, white, with the upper portion purplish red. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts., 5 lbs. or over 40 cts. per lb.

EARLY PURPLE-TOP WHITE GLOBE. One of the handsomest varieties, the upper portion of the root being a purplish red, the lower pure white. A rapid grower, attaining a marketable size sooner than other large globular varieties. Of the best quality and an excellent keeper. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts., 5 lbs. or over 40 cts. per lb.

WHITE EGG. More extensively grown than any other variety. White, egg-shaped, smooth and symmetrical, of medium size; flesh firm, sweet and mild. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts., 5 lbs. or over 40 cts. per lb.



EARLY PURPLE TOP FLAT

GOLDEN BALL, or ORANGE JELLY. Of globular form, medium size, skin rich orange, flesh pale amber, very fine-grained, mild and sweet. One of the most attractive, of the best quality and keeps well. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

YELLOW GLOBE. The standard yellow variety. The form is round, slightly flattened. Largely grown for stock, and to some extent for market. An excellent keeper. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

COW HORN, or LONG WHITE. Root long, slightly crooked and grows nearly half above ground. Clear white, except a little green at top. Though more largely used for feeding stock, it is a fine table variety, being tender, and of mild flavor. Of very rapid growth. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

Swedish, Russian or Rutabaga

SWEET GERMAN. An old variety yet largely grown, mainly for table use Sweet and mild. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

WHITE FRENCH, or ROCK. Also an old and popular sort. Roots a little longer than Sweet German, but does not otherwise differ. Valuable for table or feeding. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

BUDLONG. Originated in Rhode Island by Mr. Budlong, a very extensive grower of Rutabagas. Earlier and more nearly round than other white varieties of this class. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

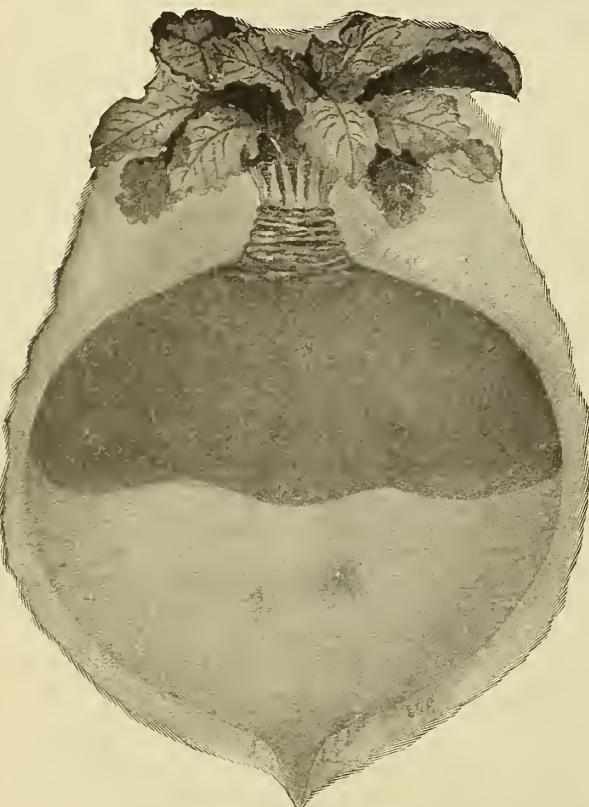
BREADSTONE. An early variety, white, faintly colored at top; medium size, tender, mild and sweet. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

SHAMROCK. A popular English Yellow Swede. A decided favorite with our local trade. Has short neck, shape oblong. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

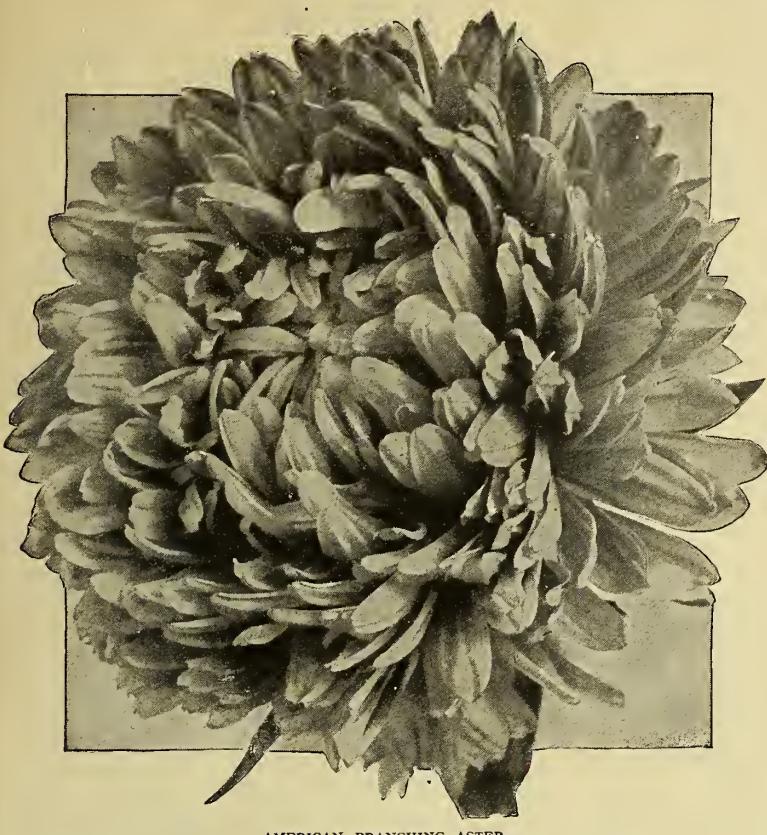
LONG ISLAND IMPROVED. This is undoubtedly the finest variety of Purple-Top Rutabaga. It grows much larger than other American varieties, is, therefore, desirable for stock, but equally desirable for the table and market, as it is tender and sweet, and of very attractive appearance. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., ¼ lb. 20 cts., lb. 50 cts.

Popular Fruit Growing By Samuel B. Green. An authentic book treating on the practical methods of fruit growing from planting to marketing. It covers the subject of insects and the best methods of destruction, winter protection, grafting, pruning and every other phase of interest to the practical fruit-grower, including small fruits. A valuable book for only \$1, postpaid.

Amateur Fruit Growing This is a splendid guide for all those who have not made a study of fruit growing and wish to follow a course of instruction that will insure successful results. This book deals with only the common practices and the simple methods of fruit-culture. An excellent book for the amateur, plain, straight-forward fruit-talk. 25 cents.



LONG ISLAND IMPROVED



AMERICAN BRANCHING ASTER

ASTERS

Our Aster seeds, procured from the most noted American and European growers, are of unsurpassed quality. This popular annual thrives in nearly all soils, well enriched. Seed may be sown in the open ground early in the spring, in this latitude usually by the last of April. The first week in May is early enough, as plants from seed sown then will usually be through blooming before frost. Good blooming plants are often grown from seed sown as late as the middle of June, but when sown so late as this, the early varieties are preferable and the plants should be grown in rich soil, with the best of care.

1 QUEEN OF THE EARLIES, or EARLIEST PARIS WHITE. One of the earliest white Asters; stems long; fine for cutting. Pkt. 5 cts., $\frac{1}{8}$ oz. 25 cts., $\frac{1}{4}$ oz. 45 cts., oz. \$1.10.

QUEEN OF THE MARKET. A very early-blooming strain, which, though plant is only $1\frac{1}{4}$ feet high, bears from ten to fifteen well-formed, medium-sized flowers on long stems. Much used by florists.

4 White. 5 Rose. 6 Light Blue. 7 Pink. 9 Mixed Colors. Each, pkt. 5 cts., $\frac{1}{8}$ oz. 20 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.25.

15 EARLY SNOWDRIFT. An extra-early variety. Plant of slender growth, having but few and narrow leaves, bearing in profusion on long, upright stems, large pure white flowers of very feathery and graceful appearance, and always full and double. Of American origin. Originator's stock, pkt. 15 cts.

20 DAYBREAK. Flowers very large and full, and borne on long stems, color a beautiful shell-pink. The plant blooms early and profusely, and is of strong and compact habit. Very popular. 2 feet. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts., oz. \$3.50.

21 PURITY. Pure White. A desirable companion to Daybreak. Identical in form of flower and general habit. Blooms at the same time. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts., oz. \$3.50.

23 LAVENDER DAYBREAK. New. Soft, clear lavender. Of same type as Purity and Daybreak. Pkt. 10 cts., $\frac{1}{8}$ oz. 60 cts., oz. \$4.00.

JEWEL or BALL. A selection from the Peony Perfection, but entirely distinct. The flowers are about $2\frac{1}{2}$ inches in diameter, having short incurved petals and are as round as a ball. They are borne on long stems, are excellent for cutting and afford a novel and pleasing effect in contrast with other types. $1\frac{1}{2}$ feet.

36 Mixed Colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts.

40 SUNLIGHT. Flowers 3 to 4 inches in diameter, of peony form. Clear sulphur-yellow, a color not common among Asters. 2 feet. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts.

VICTORIA. Considered for a long time one of the finest types, and improved in recent years. The flowers are large, double, imbricated, having petals which curve outward like those of the show dahlia. Bears freely beautiful long-stemmed flowers.

FLOWER SEEDS

Cultural Suggestions

Though some seeds need special treatment, the following general directions for outdoor culture apply to all. Make the soil fine and even by digging and raking. Though seeds should not be sown nor ground worked when it is wet and soggy, moisture is essential to the successful germination of seeds; therefore sow only on freshly worked soil. If the season is hot and dry, and soil has become dry to some depth, water profusely several hours before planting rather than at time of sowing. Sow in rows that the young plants can be easily seen, and each lot of seeds at a uniform depth, which should generally be four to six times the diameter of the seed. Make the soil over the seeds firm. This is very important, as it prevents, to a great degree, the escape of moisture. If weather following is hot and dry, it may be necessary to water. Water thoroughly; and, once commenced, regularly or not at all. A mere sprinkling, irregularly done in hot weather, allowing the soil to become dry at times, does more harm than good, as it causes a hard crust to form, through which, if the seeds germinate, the fine tender growth of the young plants cannot penetrate. Some plants do not bear transplanting well, so seeds should be sown where plants are to remain. Seeds of most plants may however, be sown in beds and the young plants transplanted, if desired. Transplanting is, of course, more easily done in rainy weather; but, if necessary, can be safely done in hot, dry weather by giving the soil a good soaking, and then shading the plants for a few days. Give frequent but shallow cultivation. Keep in mind that the main object of cultivation is to assist the growth of the plant, and not to simply destroy weeds. Shallow cultivation conserves moisture by converting the top soil into a fine mulch.

Flowering Plants are Classified as Annuals, Biennials and Perennials

ANNUALS attain full growth from seed, flower and die in one year.

HARDY ANNUALS can usually be sown as soon as the ground is worked in spring.

BIENNIALS grow from seed one year, bloom and die the next, though some bloom the first season when sown early.

PERENNIALS live for a number of years, blooming annually after the first season, although some will flower the same year if sown early.

HALF-HARDY BIENNIALS and PERENNIALS require winter protection of plants.

How to Order

When ordering, always give catalogue variety number, and while it is not necessary to give name it often serves to indicate more fully what the customer desires, as in the event of the number and name differing, we always send the variety indicated by the name as probably the one desired.

All Flower Seeds by the packet, fraction of an ounce, ounce and quarter-pound, sent postpaid at prices quoted. In larger quantities, by the half-pound and pound, they will be sent at option of the customer, either by mail, postpaid, or by express at customer's expense, as per quotations.

- 55 White. 56 Dark Scarlet. 57 Peach-Blossom Pink. 58 Dark Crimson. 59 Light Blue. Each, pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts.
- 62 Mixed Colors. A superb mixture. Pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts., oz. \$2.75. **WASHINGTON** (Giant Victoria). Flowers similar to Victoria, but larger; much used for exhibition. 2 feet.
- 65 Mixed Colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 45 cts., oz. \$3.00. **GIANT BRANCHING COMET.** Distinct and valuable; flowers resemble the Japanese chrysanthemum. Not only larger, but petals are longer and somewhat broader than the old Comet section. The plant is of vigorous, luxuriant growth and produces freely its long-stemmed, graceful flowers. $1\frac{1}{2}$ to 2 feet.
- 70 White. 71 Light Yellow. 72 Azure-Blue. 73 Rose. 74 Light Blue and White. 75 Crimson. 76 Rose and White. Each, pkt. 10 cts., $\frac{1}{8}$ oz. 35 cts.
- 80 Mixed Colors. Many colors and shades. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., oz. \$2.00.
- 81 **MIKADO PINK.** In type, Mikado Pink belongs to the Comet class. Petals are narrow, very long and gracefully reflexed. In color it is a most exquisite shade of shell-pink. Strong-growing, free-branching, long-stemmed plants. In growth these plants are unusually vigorous for their type. It is not uncommon to find plants with a dozen long, strong, graceful stems, each crowned with flowers from $4\frac{1}{2}$ to 6 inches in diameter. Pkt. 15 cts., $\frac{1}{8}$ oz. 60 cts.
- 82 **MIKADO WHITE.** Similar in every respect to Mikado Pink except color, the flowers having the same deep, fluffy form, and the plant the branching habit ascribed to the above. Blooms at the same season. Each is the best of its color in the Comet class. Pkt. 15 cts., $\frac{1}{8}$ oz. 60 cts.
- HOHENZOLLERN. A remarkable new strain of the Giant Comet type. The flowers are considerably larger and the petals are more curled. They are borne on long stems and are very graceful; of enormous size; closely resembling chrysanthemum. Of robust branching habit, and blooms earlier than the Giant Comet, $2\frac{1}{2}$ feet.
- 85 White. 86 Light Blue. 87 Rose. Pkt. 10 cts., $\frac{1}{8}$ oz. 35 cts.

ASTERS, continued

90 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., oz. \$2.00.
CREGO. Of the Comet type; similar to Hohenzollern but flower is much larger, petals twisted and curled into a very fluffy effect.

95 Shell Pink. Pkt. 15 cts.

96 White. Pkt. 15 cts.

104 **LAVENDER GEM.** Of the Ostrich Feather type. Flowers large and remarkably free from single and semi-double specimens. The feathery effect is increased in a large proportion of the flowers by long, partly tubular florets, irregularly cut and slashed. The color is an exquisite shade of lavender, which deepens with age. The plant branches close to the ground and blooms profusely and very early. 2 feet. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts.

AMERICAN BRANCHING. A superior late-blooming strain of American origin. The flowers are of the largest size, borne on long, graceful stems, often 15 or more inches in length, are exceedingly beautiful and unsurpassed for cutting. The plants are of extra-large and strong growth, and bloom profusely. 2½ feet.

108 White. 109 Pink. 110 Lavender. 111 Crimson. 112 Purple. Each pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

116 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.75.

117 **VIOLET KING.** In habit similar to the American Branching. The flowers are entirely distinct from any other, petals somewhat resemble those of the quilled sorts, but are much larger, those in the center being curiously twisted, curled and incurved, completely covering the crown. In shape and size, round, full and very large, often 4 and 5 inches in diameter; color soft violet-lilac. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.

Semple's Branching. The plants of this Early Branching Aster attain the size and vigor of the famous American Branching, but blossom from 10 days to 2 weeks earlier. Extra large, perfectly formed flowers on long stiff stems make them especially desirable for cutting, for exhibition or for sale.

118 Lavender. 119 White. 120 Shell Pink. 121 Crimson. 122 Mixed. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.

124 **WORCESTER MIXTURE.** Our own mixture of the leading choice varieties, includes every color and shade known among Asters, and will afford, especially if purchased in bulk, the greatest diversity of both colors and types. Purchasers of a single packet may be certain of securing a choice collection of desirable varieties. Pkt. 10 cts., $\frac{1}{2}$ oz. 35 cts., $\frac{1}{4}$ oz. 65 cts., oz. \$2.25.

125 **Good Mixed.** Our own mixture of many varieties; a wide range of colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 35 cts., oz. \$1.

ASTERMUM. A strain of Giant Comet Asters which, on account of their immense size and Chrysanthemum-like appearance, have appropriately been named Astermums. The plants grow about 2 feet high with long strong stems and should come into bloom about the middle of August.

126 White. 127 Pink. 128 Lavender. Pkt. 15 cts.

Abronia

A beautiful little trailing plant, bearing freely in the autumn months verbena-like fragrant flowers. Sow in the house and transplant, or very early in the open ground. Hardy annual.

130 **ARENARIA.** Yellow. Pkt. 5 cts.

131 **UMBELLATA.** Rose, white eye. Pkt. 5 cts.



GIANT COMET ASTER

Achillea

135 **PTARMICA, The Pearl.** One of the best white, hardy perennials, bearing profusely and continuously from June until frost, beautiful small, white, double flowers; useful for cutting. Easily grown from seed. Desirable and often used in cemeteries. 2 feet. Pkt. 15 cts.

Acroclinium

EVERLASTING FLOWER

A half-hardy annual, bearing attractive white and rose-colored single and double flowers chiefly used when dried for winter bouquets and wreaths; for this purpose, flowers should be cut before fully expanded. 1½ feet.

139 Light Rose and Pure White, Mixed. Pkt. 5 cts.

Adlumia

140 **CIRRHOSEA** (Mountain Fringe; Allegheny Vine). A beautiful hardy, climbing biennial, which usually self-sows. The feathery foliage resembles that of the maidenhair fern. Of rapid growth and produces, in great profusion, small, tube-shaped pink blossoms. Of the easiest culture. Desirable for covering trellises, stumps, etc. 10 to 15 feet. Pkt. 5 cts.

Adonis

Hardy, free-flowering plants, bearing showy, attractive flowers, and requiring little care. Seed sown should be in the open ground in the autumn, or started early in March.

144 **ESTIVALIS** (Flos Adonis; Pheasant's Eye). Hardy annual, bearing intense blood-red flowers, which, in contrast with the finely cut, dark, green foliage, give the plant a very striking appearance. 1 foot. July and August. Pkt. 5 cts.

145 **VERNALIS** (Ox-Eye). Hardy perennial, blooming early in spring; when once established, may be easily increased by division. Flowers large, yellow, 18 inches. May and June. Pkt. 5 cts.

Ageratum

One of the best hardy annuals for summer bedding flowers. Easily grown from seed, which should be sown in the house, as it lengthens the time of blooming which continues until frost. Its season, however, compares favorably in length with other annuals when seed is sown in the open ground. Set the dwarf kind 10 inches apart, and they soon make a mass of color.

148 **MEXICANUM.** Blue. 1½ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts.

149 **MEXICANUM ALBUM.** White. 1½ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts.

150 **IMPERIAL DWARF WHITE.** 8 inches. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

151 **LITTLE DORRIT.** Azure-blue. 8 inches. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

152 **PRINCESS VICTORIA LOUISE.** Sky-blue, with white center; variable. 8 inches. Pkt. 10 cts.

153 **SWANLEY BLUE.** Large-flowered. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

154 **LASSEAUXI.** Fine rose, should be started very early to insure good bloom. Pkt. 10 cts.

158 **MIXED COLORS.** All varieties mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Agrostemma

Pretty, free-blooming plants of easy culture, especially desirable for dry situations. Excellent for cutting.

160 **COELL-ROSA** (Rose of Heaven). Rose, white center. Hardy annual. 1½ feet. Pkt. 5 cts.

161 **CORONARIA** (Rose Champion). One of the earliest hardy perennials. 1½ feet. Mixed colors. Pkt. 5 cts.

Alyssum

A well-known, favorite, hardy annual, blooming profusely the entire season. Excellent for edgings. No other white flower is so well adapted for a dense, low carpet, or as borders and ribbons in garden work. Extremely fragrant and frequently used for bouquets. Of easiest culture. Sure to make a good display. Sow seed early in April.

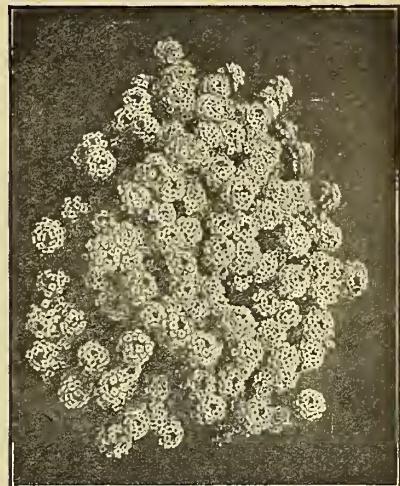
166 **SWEET ALYSSUM**. Fragrant, white. 1 foot. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts.

167 **LITTLE GEM**. Of spreading habit, forming compact masses of bloom often a foot or more in diameter. White, fragrant. 1½ feet. Pkt. 5 cts., ½ oz. 25 cts., oz. 40 cts.

168 **CARPET OF SNOW**. Of very dwarf habit; white, fragrant. 4 inches. Pkt. 5 cts., ½ oz. 30 cts., oz. 50 cts.

170 **SAXATILIS COMPACTUM**. Hardy perennial, bearing in great profusion in early spring golden yellow flowers. Desirable for rockwork or for massing. 1 foot. Pkt. 5 cts., ¼ oz. 20 cts., ½ oz. 35 cts., oz. 60 cts.

171 **LITTLE DORRIT**. Little bushes fairly smothered with miniature white flowers. A gem for edging and beds. 4 inches high. Pkt. 5 cts., ½ oz. 35 cts., oz. 60 cts.



NEW ALYSSUM

Amaranthus

Brilliantly colored foliage, and bearing peculiarly formed flowers. While in rich soil the plants and leaves are much larger, the colors are seldom as brilliant as when grown on rather poor soil. Of easiest culture. Give plenty of room to develop.

175 **CAUDATUS**. (Love-Lies-Bleeding). Long, drooping flower, blood-red. Half-hardy annual. 2 feet. Pkt. 5 cts.

176 **CRUENTUS** (Prince's Feather). Spikes of dark red flowers. Half-hardy annual. 3 feet. Pkt. 5 cts.

177 **SALICIFOLIUS** (Fountain Plant). Long, gracefully undulated foliage, beautifully variegated, varying from green to bronze, banded and tipped with carmine. Tender annual. 3 feet. Pkt. 5 cts.

178 **TRICOLOR SPLENDENS** (Joseph's Coat). Red, yellow and green foliage. One of the most beautiful of ornamental-leaved plants. Hardy annual. 2 ft. Pkt. 5 cts.

Ampelopsis

182 **VEITCHII** (Boston Ivy; Japan Ivy). The well-known, popular climbing vine, so often seen on walls of churches, schoolhouses, etc. Grows rapidly and clings to the smoothest surface. Ornamental the entire season, the dark green glossy leaves changing in the autumn to beautiful shades of scarlet, crimson and orange. Easily grown from seed. Entirely hardy except in the far North. Stands the dust and smoke of cities exceedingly well. Pkt. 10 cts., ½ oz. 15 cts., oz. 25 cts.

Anemone (Windflower)

A very popular hardy garden perennial.

188 **CORONARIA**. Single, mixed colors. The well-known Poppy-flowered Anemone. 1 foot. Pkt. 5 cts.

189 **CORONARIA, ST. BRIGID**. An improved strain, bearing larger and more brilliant flowers, and remaining in bloom longer. 1 foot. Pkt. 10 cts.



Aquilegia
(Columbine)

Beautiful free flowering, hardy perennials, blooming throughout the spring and early summer. Of easy cultivation and will thrive in partial shade. 1 to 3 feet.

200 **Single Mixed**. Pkt. 5 cts., ¼ oz. 15 cts., oz. 40 cts.

202 **Double Mixed**. Pkt. 5 cts., ¼ oz. 15 cts., oz. 40 cts.

203 **COERULEA** (Rocky Mountain Columbine). Splendid large, light blue. Pkt. 15 cts., ¼ oz. 75 cts.

204 **COERULEA HYBRIDA** pl. fl. Long spurred flowering hybrids in fine colors. Pkt. 25 cts.

Arabis

209 **ALPINA** (Rock Cress). A pretty, little hardy perennial, thriving in dry soil, and one of the earliest to bloom. Flowers white and deliciously fragrant; resembles Sweet Alyssum. The plant is covered with bloom and is excellent for rockwork and edgings. 6 inches. Pkt. 10 cts.

Arctotis

210 **GRANDIS** (African Lilac Daisy). A beautiful new annual from Africa, of luxuriant branching growth, bearing freely from July until frost, large, long-stemmed, daisy-like flowers, about 3 inches across; pure white on upper surface, reverse side of pale lilac. Pkt. 10 cts., 1-8 oz. 20 cts., ¼ oz. 30 cts.

215 **SIPHO** (Dutchman's Pipe). A hardy perennial vine of rapid growth, with large glossy heart-shaped leaves, bearing curious yellowish-brown blossoms, somewhat resembling a pipe. 15 to 20 feet. Pkt. 15 cts.

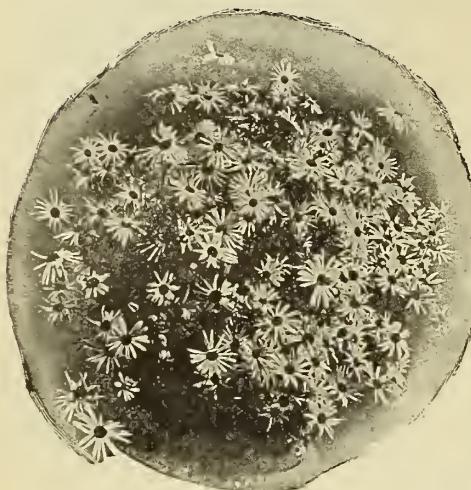
Aristolochia

216 **PLUMOSUS NANUS**. Beautiful house plants; the feathery foliage is unrivalled for cutting. Pkt. 25 cts., 100 seeds, \$1.00.

217 **SPRENGERI**. Excellent plants for table decorations. Pkt. 15 cts., oz. 75 cts.

Asparagus

218 **ODORATA** (Sweet Woodruff). A hardy perennial, blooming freely and continuously in rather moist soil and a partially shaded location. The flowers are white, but the plant is largely grown for its fragrant leaves and stems, which are used when dried for the same purposes as those of lavender. 1 foot. Pkt. 5 cts.



BRACHYCOME

BELLIS PERENNIS (Double Daisy)

A perennial plant, bearing in early spring small, double white or rose-colored flowers. It succeeds best here in a rich, loamy soil, partially shaded. It is generally classed as hardy, but really needs a slight protection through the winter. 4 inches.

245 Mixed Colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts.

246 LONGFELLOW. Dark Rose. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts.

247 SNOWBALL. Pure White. Pkt. 10 cts., $\frac{1}{8}$ oz. 50 cts.

BRACHYCOME (Swan River Daisy)

A free-flowering plant of dwarf, compact growth, bearing in great profusion beautiful single blue or white flowers. Effective as edgings or in beds, and suitable for rustic baskets or pot culture. Half-hardy annual. 1 foot.

250 Mixed Colors. Pkt. 5 cts.

BROWALLIA

A beautiful, free-blooming half-hardy annual. Seed may be sown in the open ground when warm, but preferably should be sown early in the house or hotbed, and, if possible, repotted once or twice. The plants will then bloom early and be covered throughout the summer with their beautiful blue and white flowers. For beds, borders or pots few equal it. 1½ feet.

251 Blue and White, Mixed. Pkt. 5 cts.

CANARY CREEPER (*Tropaeolum Canariensis*)

275 A rapid-growing, half hardy annual climber, bearing curiously formed yellow flowers. Blooms until frost. Fine for shady places. 10 to 15 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

CANTERBURY BELLS

(*Campanula medium*)

Well-known, beautiful, hardy biennials. Like all of this class, may be sown where they are to remain any time after midsummer, or in beds in the spring for transplanting. The Calycanthema (Cup-and-Saucer) class is so named because of the broadening of the calyx into a saucer-shaped secondary flower. In permanent situations, plants should stand 18 to 20 inches apart. All varieties succeed best in a rich, rather sandy, well-drained soil.

267 PRIZE MIXTURE. A superb mixture of all classes, single, double, and cup-and-saucer. Pkt. 10 cts., $\frac{1}{8}$ oz. 20 cts.

268 SINGLE, MIXED COLORS. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.

269 DOUBLE, MIXED COLORS. Pkt. 5 cts., $\frac{1}{8}$ oz. 15 cts.

272 CALYCANTHEMA (Cup-and-Saucer). Mixed Colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 20 cts.

273 CALYCANTHEMA. Blue. Pkt. 5 cts., $\frac{1}{8}$ oz. 20 cts.

274 CALYCANTHEMA. White. Pkt. 5 cts., $\frac{1}{8}$ oz. 20 cts.

CANDYTUFT

Popular hardy annual, growing in any soil, requiring but little care, and by repeated sowings may be had in bloom all summer. 6 inches to 1 foot.

276 CARMINE. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

277 DARK CRIMSON (Dunnett's). Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

278 EMPRESS. Large trusses; pure white. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts.

279 GIANT HYACINTH-FLOWERED. Heads of immense size, resembling the hyacinth. White. Generally considered superior to Empress. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts.

280 MIXED COLORS. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

281 QUEEN OF ITALY. New. Of dwarf, bushy habit. Large pink flowers; fine. 6 inches. Pkt. 5 cts., $\frac{1}{2}$ oz. 25 cts., oz. 40 cts.

282 DWARF HYBRIDS. Mixed colors. Of dwarf habit, but flowers are large. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts.

283 WHITE FRAGRANT. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

BALSAM

This old favorite annual, sometimes known as Lady's Slipper, has been continually improved for several years, the flowers of some strains now closely rivaling in size and beauty those of the Camellia. Requires rich soil, full exposure to the sun and plenty of water, to be grown to perfection, but is otherwise of easy culture. We offer seed of the most improved types, which will, with favorable conditions, produce a large proportion of double flowers. 2 feet.

225 IMPROVED CAMELLIA-FLOWERED, MIXED COLORS. Double flowers of the finest type and a wide range of beautiful colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

226 NEW DOUBLE WHITE (*Alba perfecta*). Extra Fine. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

227 DOUBLE DARK RED. Beautiful rich color. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

228 DOUBLE PINK (PRINCE 3'SMARK). Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts., oz. \$1.00.

230 CHOICE MIXED. Double flowers of many colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts., oz. 50 cts.

BALLOON VINE

235 A tender annual climber of rapid growth bearing small, white flowers, followed by curious inflated seed-vessels, somewhat resembling a balloon. 10 to 15 feet. Pkt. 5 cts.

BARTONIA AUREA

236 Showy hardy annual of distinct character, its golden yellow flowers being freely produced it grows well in partial shade but should not be crowded.

BEANS, ORNAMENTAL VARIETIES

The Scarlet and White Runner Beans are deservedly popular as ornamental climbers, as but few plants grow so rapidly, and none is more easily grown. The former is largely grown alone for ornament, but all are very attractive. The Butterfly is a very pleasing novelty, having large flowers which are white with salmon-rose standard, followed by pods that equal in edible qualities those of the standard garden sorts. The beans of the White Runner are used in some localities as green shell beans; Scarlet are also edible, but seldom used. All should be treated as directed for Pole Beans.

240 SCARLET RUNNER. Pkt. 5 cts.

242 BUTTERFLY. New, charming, white and rose. Pkt. 10 cts.

241 WHITE RUNNER. Pkt. 5 cts.

CALENDULA (Pot Marigold)

A very free-blooming hardy annual of easy culture. Grows well in nearly all soils. Flowers double, borne on stiff stems, and are cut to some extent, but the plant is more desirable for bedding. 1 to 1½ feet.

255 METEOR. Yellow, striped orange. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

256. ORANGE GIANT. Extra large, orange. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

257 PRINCE OF ORANGE. Orange, striped yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

258 SULPHUR CROWN. Sulphur-yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

259 Mixed Varieties. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

CALLIOPSIS

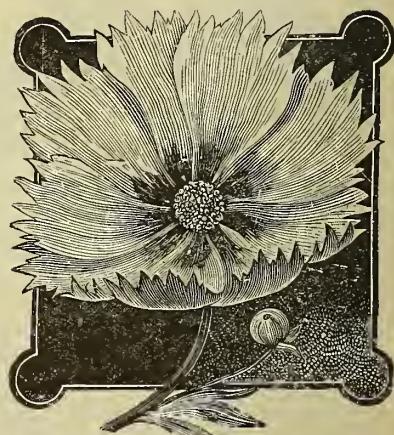
Well-known, profuse-flowering hardy annuals of the easiest culture. Numbers 260 and 263 represent the type more commonly known. Numbers 261 and 262 resemble in habit, foliage and flower the perennial type, generally known as *Corcopsis*.

260 Mixed Colors. 1½ to 2 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

261 CORONATA MAXIMA. Yellow; extra large. 1½ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

262 GOLDEN WAVE. (*Drummondii*). Golden yellow, with small dark center. 1½ feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

263 RAY OF GOLD. New, yellow, with purplish brown center, 6 to 8 inches. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.



CALLIOPSIS

Carnation

Well-known and very popular half-hardy perennial, which, until the introduction of the Marguerite class, was mainly grown by the florist in the greenhouse and occasionally by the amateur in pots in the house. The Marguerite class, including the original and later introductions of similar type, are treated as annuals, blooming in about four months from seed, which may be sown in the open ground early in the spring, usually by May 1, but preferably earlier in the house, and plants set in the open about the middle of May as this greatly lengthens the period of blooming. By cutting off the flower-stems early in the fall and potting the plants, they will bloom freely through the winter if kept in a cool room. The Carnation requires a rich soil, and, in such, the plants should stand about 12 inches apart.

- 286 MARGUERITE IMPROVED SEMI-DWARF. An improved strain, blooming four months after sowing. Flowers are larger, a greater proportion double and the variety of colors much greater than those of the original. Pkt. 10 cts. 1-8 oz. 20 cts., $\frac{1}{4}$ oz. 35 cts.
- 287 MARGUERITE GIANTS. Flower approaches in form, size, fragrance and beauty those grown by the florist. Great variety of color. Blooms four months after sowing. Pkt. 10 cts., 1-8 oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.
- 288 CHAUBAUD'S GIANT PERPETUAL. A new strain remarkable for its combination of earliness with the continuity of bloom and perfection of flowers of the perpetual type. Blooms in four or five months after sowing. Flowers large, a high percentage double. Deliciously fragrant and greatly varied in coloring. Pkt. 15 cts.
- 290 DWARF VIENNA. Blooms early the second summer from seed. The hardiest sort, said to stand the winter with a slight protection. Flowers large, double, fragrant and of varied colors. Pkt. 10 cts., 1-8 oz. 25 cts.
- 292 DOUBLE FINE MIXED. A choice strain of the regular type, blooming the second year from sowing. Most desirable for house culture. Pkt. 10 cts.



Cineraria

Hybrida Grandiflora

ROSS' PRIZE MIXTURE. The plants are of compact growth carrying extra large flower heads with flowerets of unusual size and substance. This strain includes the brightest and richest self colors as well as a good mixture of all colors. Pkt. 25 cts.

Castor Bean. (*Ricinus*)

Well-known tender annual; tall, stately, majestic plants of very rapid growth, with palm-like leaves of glossy green, brown or bronze hue; very effective for lawns, planted singly or in groups. 6 to 15 feet.

- 295 BORBONIENSIS. Large, showy foliage of purplish hue. 15 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts.
- 296 CAMBODGENSIS. Stalks and stems nearly black; leaves large, of a deep bronze maroon. 6 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
- 297 SANGUINEUS (Tricolor). Stalks blood-red, foliage reddish bronze, with scarlet seed-pods. 6 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts.
- 298 ZANZIBARENSIS. A comparatively new class, with gigantic leaves, ranging in color from light green to deep bronze. 10 to 15 feet. Mixed varieties. Pkt. 5 cts., $\frac{1}{2}$ oz. 12 cts., oz. 20 cts.
- 300 All Varieties Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

Cockscomb

(*Celosia cristata*)

Popular free-blooming, half-hardy annual, bearing flowers of comb-like form, the recently improved strains producing under best cultivation heads of enormous size. Grown either by itself or combined with other plants, the Cockscomb makes a striking and effective display. While seed may be, and more generally is, sown in the open ground, for best results it should be sown early in the house, and the young plants transplanted into small pots in which they should remain until they show signs of blooming, when they should be shifted to a permanent location. The Cockscomb requires good rich soil, ample room and plenty of moisture to fully develop its flowers.

- 305 GLASGOW PRIZE. Crimson; dark foliage. 9 inches. Pkt. 10 cts., 1-8 oz. 30 cts.
- 306 GOLDEN YELLOW. 9 inches. Pkt. 10 cts. $\frac{1}{2}$ oz. 30 cts.
- 307 MIXED. Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts.
- 310 DWARF, EXTRA-CHOICE, MIXED. Includes all the latest introductions and colors of the Cockscomb. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts.

Feathered Celosia

(*Celosia plumosa*)

Often used for winter bouquets, and for this purpose should be cut before fully ripe and dried in the house. The class requires the same treatment as the preceding. Half-hardy annual. 1 to $1\frac{1}{2}$ feet.

- 311 THOMPSON'S SUPERB. Graceful, feathery plumes of rich crimson, which contrast beautifully with the purplish bronze foliage. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts.
- 312 GOLDEN PLUME. Golden yellow. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts.
- 313 THOMPSON'S MAGNIFICA. A splendid strain, large plumes, ranging from clear yellow to darkest red. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 35 cts.
- 316 CHOICE MIXED. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 40 cts.

Centaurea

To this family belong the well-known annuals, Bachelor's Button, and Sweet Sultan, and also the plants known as Dusty Millers.

CYANUS (Bachelor's Button, or Cornflower.) Popular hardy annual of the easiest culture, blooming quickly after seed is sown and for a considerable time if flowers are kept well cut. 2 feet.

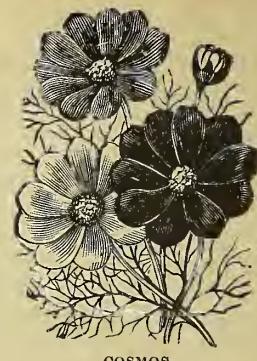
318 SINGLE and DOUBLE, MIXED. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
 319 White. 320 Lilac. Each, pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
 321 MOSCHATA (Common Sweet Sultan). Mixed colors. Pkt. 5 cts.
 322 SUAVEOLENS (Yellow Sweet Sultan). Pkt. 5 cts.

IMPERIALIS (Royal Sweet Sultan). A new and greatly improved type of Sweet Sultan. Both the plants and flowers are much larger than the common. The flowers are borne on long, stiff stems, and will last for several days after cutting. They are very fragrant and colors delicate and beautiful.

323 Blue. 324 White. Each, pkt. 10 cts.
 325 Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

WHITE-LEAVED CENTAUREAS (Dusty Miller). Half-hardy perennials, which are grown annually from their seed for their foliage only. Used with other foliage and flowering bedding plants.

326 CANDIDISSIMA. Deeply cut silvery white foliage, densely covered with white hairs 1 foot. Pkt. 10 cts.
 327 GYMNOCARPA. Silvery white foliage; of graceful drooping habit. $\frac{1}{2}$ feet. Pkt. 10 cts.



COSMOS

Chrysanthemum Annual Varieties

Free-flowering plants of branching habit, with rich, finely cut and very ornamental dark green foliage, bearing on long stems daisy-like flowers of bright and varied colorings. These colorings on the single varieties, are usually in distinct rings and look, on the flat petals, as though they were painted on. Both grow freely from seed, are of easy culture, very desirable for cutting, and are effective bedding plants. They should be given plenty of room, from 2 to 2½ feet, and will bloom more freely on soil of medium fertility. Hardy annual. 1 to 1½ feet.

330 SINGLE (Painted Daisies). Mixed colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
 333 DOUBLE (Marguerites). Mixed colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 40 cts.

Clarkia

A pretty hardy annual from California; much improved in recent years. Blooms profusely in either sun or partial shade. Colors rose, salmon-pink, purple and white. 1 foot.

338 Single and Double Mixed. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

Cobaea

345 SCANDENS. (Climbing Cobaea). A beautiful, rapid-growing, half-hardy perennial climber, blooming the first year from seed, bearing large bell-shaped flowers; at first green, but changing to a beautiful deep violet-blue. A clean porch climber, free from insects. Sow early in the house and pot the plants, as this greatly lengthens the period of bloom, and the plants will make a much greater growth. Seed germinates more readily if pushed into the ground edgewise and barely covered. 20 to 30 feet. Pkt. 10 cts.

Coleus

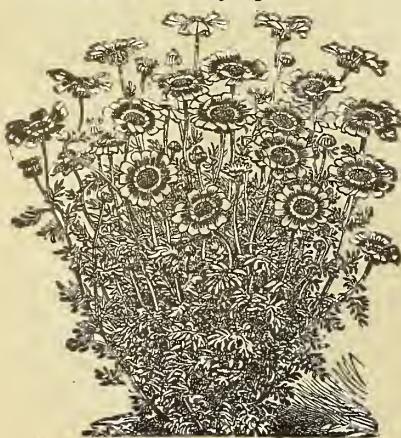
Popular ornamental foliage plants, usually propagated by cuttings, but easily grown from seed, from which many new varieties may be expected, affording an interesting experiment to the amateur. Sow in heat in March or April and transplant to open ground about the first of June. For borders of geranium or canna beds and in carpet-bedding, very useful. Grows rapidly. 350 CHOICE HYBRIDS, Mixed. From a large collection; of greatly diverse shades and markings. Pkt. 10 cts.
 351 New Large-Leaved Varieties, Mixed. Saved from new varieties with very large and richly variegated foliage. Pkt. 25 cts.

Collinsia

A free-flowering hardy annual from California, of easiest culture and great beauty. Seed preferably should be sown in the fall, as the plants will bloom much earlier than from seed sown in the spring. It may, however, be sown in the spring, if desired. 1 foot.

353 Mixed Colors. Pkt. 5 cts.

COLUMBINE. See Aquilegia



Convolvulus Minor

(Dwarf Morning-Glory)

Half-hardy annual of trailing habit, growing about 1 foot high and covering a space of 2 feet, and bearing abundantly bell-shaped flowers similar to those of the tall sort. Flowers open on clear days about noon and remain open until evening, are pure white and of many shades of blue and red.

356 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

15 cts.

Coreopsis

For Annual Varieties, see Caliopsis

358 LANCEOLATA GRANDIFLORA. A beautiful, hardy perennial, blooming profusely the first season from seed sown early and continuously until frost. The flowers are a rich golden yellow, often 3 inches in diameter, borne on fine long stems and are very desirable for cutting. Of easiest culture, growing anywhere. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

Cosmos

A rapid-growing graceful plant, with beautiful, feathery foliage, bearing flowers which resemble the single dahlia; a very hardy annual of strong, vigorous habit, growing about 5 feet high in ordinary soil and often 8 feet in very rich. It is seldom given room enough; plants should not stand closer than 2½ feet apart, and in rich soil, a greater distance. Cosmos makes a most desirable background for many other plants, its beautiful, finely cut foliage alone making it well worth the growing for this purpose. Its value, however, is greatly increased by its lovely flowers,—white, pink, crimson or rosy purple,—borne in great profusion on long stems, rising above the foliage in an especially graceful manner, equally graceful in appearance when arranged in a vase with sufficient foliage. For this purpose but few other flowers are so desirable, and none can be had so late in the season. Topping the plants when half-grown will induce earlier flowering, and they will also bloom earlier and more profusely if grown on rather light and not too rich soil.

360 MAMMOTH PERFECTION. Mixed colors. Flowers of mammoth size, rather late in flowering; seed should therefore be sown as early as possible in the house in March, or, as the plant is especially hardy, in the open ground in a sheltered spot in April. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

361 DWARF EARLY-FLOWERING. This, while flowers are not so large as the Mammoth, is growing in favor because of its earliness. If seed is sown in open ground in early spring, plants will begin to bloom the last of July and continue until November, making it, therefore, especially desirable in northern latitudes. 4 feet. Mixed colors, pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

362 LARGE EARLY FLOWERING. See page 25. Pkt. 10 cts.

363 CRIMSON RAY. See page 25. Pkt. 10 cts.

364 LADY LENOX. Long stemmed flowers of immense size, often measuring 5 inches across. Unparalleled both for garden decoration and cut flowers. 6 to 7 feet. Pink. Pkt. 15 cts.

Cucumber Vine

365 WILD (Echinocystis lobata). One of the most rapid-growing of all annual climbers and blooms early in the season, and continuously until fall. Of the easiest culture, growing wild in the West from self-sown seed. One of the most desirable annual climbers for quickly covering any unsightly object; growing 30 feet, and covered with small, white fragrant flowers, followed by an abundance of prickly but ornamental seed-pods, it at all times presents a striking and effective appearance. Seed may be sown either in the fall or spring. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Ross' Giant Cyclamen

Charming house plants, with beautiful foliage and rich colored, fragrant flowers. Universal favorites for winter and spring blooming. May be successfully raised from seed with a little care and patience.

366 Giant White. 367 Giant Dark Red. 368 Giant White with Red Eye.

369 Giant Mixed.

Cypress Vine

(Ipomoea Quamoclit)

A popular climbing vine, with delicate fern-like foliage, bearing in abundance small, star-shaped, rose, scarlet or white flowers. Of easy culture. Half-hardy annual. 10 to 12 feet.

370 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

DAHLIA

The growing of the double varieties from seed is always more or less of an experiment, but fine flowers of the single type can be easily secured from seed the first season. If seed of the double sorts is sown in March and the young plants set in the open ground as soon as danger of frost is past, some of the plants, perhaps half, will bloom the first season. The single varieties, however, will all bloom the first season from seed sown in the open ground as late as the first week in June. An earlier planting is, however, preferable. Tender perennial. The tubers formed each season should be stored in a frost-proof cellar.

371 SINGLE, MIXED COLORS. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 50 cts.

372 SPECIAL MIXTURE of Giant-Flowered Single Varieties. Comprises seed from noted German, English and Holland growers, and includes the Giant Perfection, and Colossal strains, and Hornsveld's Giant Hybrids. An unsurpassed mixture of the greatest possible diversity of colors. Pkt. 15 cts., $\frac{1}{8}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.

373 DOUBLE, LARGE-FLOWERED. Mixed colors. Saved from the finest show varieties. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts., $\frac{1}{4}$ oz. 40 cts.

DAISY

It has always seemed to us unfortunate that the English Daisy (*Bellis perennis*) should have been given its common name, as we are quite sure that nearly every one instinctively associates with the terms "daisy" or "daisy-like," flowers which resemble in form and habit our common field daisy. We therefore list under this head the famous Shasta Daisy and Michaelmas Daisies and call attention to other flowers often known as Daisies, but listed elsewhere under different names.

BURBANK'S SHASTA DAISY. An extremely hardy perennial, thriving in all soils, blooming more freely each season, and, when once established, for several months. Easily grown from seed and can be also increased by division of the root. The flowers are from 3 to 4 inches across, borne on very long, stiff, wiry stems, and remain in good condition for many days after being cut.

378 ALASKA. Pure glistening white. Pkt. 15 cts.

379 BURBANK'S SELECTED HYBRIDS. A mixture of seeds saved from the best seedlings, including some with double rows of petals. Pkt. 15 cts.

MICHAELMAS DAISIES. (Perennial Single Aster.) Beautiful and showy hardy perennials, easily grown from seed, blooming profusely in the autumn months, and the first season if seed is sown early.

381 MIXED COLORS. Pkt. 10 cts.

For other flowers known as Daisies see Anthemis, Brachycome and Chrysanthemum.

DELPHINIUM. LARKSPUR

Showy, hardy annuals and perennials, thriving in nearly all soils if well enriched and open to the sun. Seed of the annual sorts, though more generally sown in the spring, should preferably be sown in autumn, as plants commence blooming much earlier. Seed of the perennial kinds may be sown in the open ground from April to October, or inside in March, and if plants are kept growing well until June, and then set in the open border some will bloom well in the autumn months. The Larkspurs are especially desirable because of their lovely blue shades, of which most gardens are in need. They should be planted in great masses in the garden. Also extremely effective in long rows bordering drives or walks through woods or natural parks, where shrubbery is available as background.



ANNUAL DELPHINIUMS

385 DOUBLE DWARF ROCKET. 1 foot. Mixed colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
DOUBLE BRANCHING—386. Pink. 387. Carmine. 388. Dark Blue. 389. Light Blue. 390. White. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

391 DOUBLE IMPERIAL BRANCHING (Emperor). Mixed colors. A superior strain. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

PERENNIALS.

393 ELATUM (Bee Larkspur). Flowers have curiously folded, hairy petals in the center, which give them a fancied resemblance to a bee. Rich shades of blue, with black center. 2½ feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

394 FORMOSUM. The large flowers are deep rich blue, with white centers. 2½ feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

395 SIBIRICUM HYBRIDUM. Shades of blue. If sown early, will bloom in August. 2 feet. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts.

DIELYTRA, OR DICENTRA

Spectabilis (Bleeding Heart, or Seal Flowers), an old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive, it is used largely for forcing and is perfectly at home in any part of the shrubbery border and especially valuable for planting in the shade. Price 10 cts. per pkt.

DIANTHUS. PINKS

The following varieties of Dianthus, commonly known as Chinese and Japanese Pinks, have been, for a long time, very popular, and deservedly so. In diversity of rich and beautiful markings they have but few rivals, and in ease of culture, freedom of bloom, and almost certain satisfactory results, they stand close to the Nasturtium. Hardy biennials blooming the first year from seed. So easily grown from seed as to be rarely treated as biennials. Seed may be sown in the open ground any time in May. Plant 6 inches apart. Height 1 foot.

398 DOUBLE CHINA (D. Chinensis fl. pl.). Small, double flowers, borne in large clusters, of many colors, mostly with white edge. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

399 HEDDEWIG'S DOUBLE (D. Hedewigii fl. pl.). Japan Pinks. Very large, double flowers of a wide range of color, running from white and light pink through shades of red to rich, velvety crimson and deep maroon almost black. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.

400 SINGLE MIXED. Large single flowers, of rich and varied coloring. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

401 MARVELOUS (D. mirabilis). A novel, new strain; large, single flowers borne on stiff, straight stems; petals cut above half their length into thread-like fringe and much twisted. Of an unusually wide range of colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts.

402 PRINCESS PINK (D. laciniatus punctatus). A very interesting variety; medium-sized single flowers mottled, flaked and striped. Rarely two colors alike. Pkt. 10 cts.

403 DOUBLE DIADEM (D. diadematus fl. pl.). Large double, fringed flowers of fine, regular form and of various tints of crimson-purple to very deep purple, with white edge. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.

404 DOUBLE IMPERIAL (D. imperialis fl. pl.). A popular strain; fine, large, double flowers of many colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., $\frac{1}{2}$ oz. 25 cts.

405 DOUBLE ROYAL, or KING'S PINKS (D. nobilis fl. pl.). An ideal strain, the earliest to bloom, flowers of the largest size and of remarkably bright solid or self colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts.

406 DOUBLE, FRINGED JAPAN (D. laciniatus fl. pl.). Large, double, fringed flowers of rich and varied coloring. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.

407 FIREBALL. Of dwarf habit. Flowers globular, double, dark blood-red. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.

408 SNOWBALL. Very double, pure white. Excellent. Pkt. 10 cts.



409 SAIMON KING (Double Salmon Queen: D. Salmonœus fl. pl.). New; brilliant salmon; double; distinct and attractive. Pkt. 10 cts.

410 PURITY. A new double clove-scented white Dianthus. Flowers, large and double possessing a delicious fragrance. A decided acquisition to this large family of beautiful flowers. Pkt. 10 cts.

415 WORCESTER MIXED. All the above and other choice strains. Unparalleled. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts., oz. 60 cts.

HARDY PERENNIAL VARIETIES

Clove or Grass Pinks; *Dianthus plumarius*

Improved forms of the old well-known Clove Pink. They grow anywhere and bloom very profusely. Flowers of many pleasing colors and deliciously fragrant. Very useful for the hardy border.

- 416 **SINGLE** (Pheasant's Eye, Pink). Mixed colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.
- 417 **DOUBLE** and **SEMI-DOUBLE**. Mixed colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 25 cts.
- 418 **FLORIST'S PERPETUAL PINK** (*D. semperflorens*). Double and semi-double; large flowers; very fragrant and of a great diversity of colors. Blooms nearly all summer and if sown in March will generally bloom the first season. Pkt. 15 cts.
- 419 **NEW DWARF EARLY-FLOWERING** (Dwarf Erfurt Clove Pink). Blooms two weeks earlier than others. Flowers double and semi-double, of spicy fragrance and rich colors. Of compact growth and marvelously profuse in bloom. Pkt. 15 cts.

DIGITALIS (Foxglove)

Favorite hardy plant bearing in June and July tall flower spikes. Of easy culture. Well suited for background to other plants, and for naturalizing in the edges of woods. Hardy biennial or perennial. 2½ to 3 feet.

- 423 **MACULTA SUPERBA** (Ivory's Spotted). A choice strain of spotted varieties. Pkt. 10 cts.
- 424 **MONSTROSA**. Mixed colors. Monstrous flowers. Attractive. Pkt. 10 cts.
- 427 **PURPUREA** (Common Foxglove). Mixed colors. Pkt. 5 cts.
- 428 **PURPUREA**. Rose. Pkt. 5 cts.
- 429 **PURPUREA**. White. Pkt. 5 cts.

DOLICHOS (Hyacinth Bean)

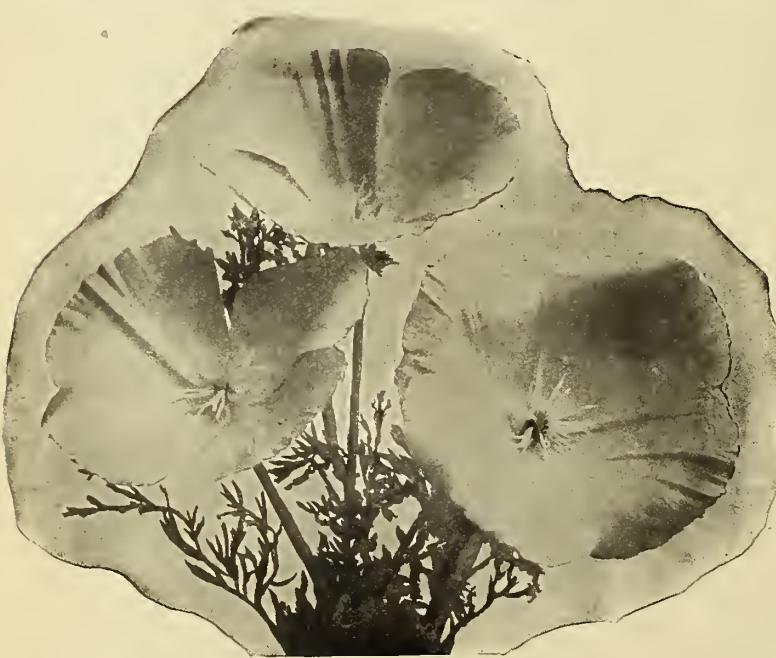
A rapid-growing, hardy, annual climber, bearing all summer clusters of white or purplish blue flowers, followed by ornamental seed-pods. Sow in May where plants are to remain. 10 feet.

- 433 Mixed Colors. White and Purple. Pkt. 5 cts., oz. 10 cts.

ESCHSCHOLTZIA (California Poppy)

A very showy hardy annual, with beautiful, finely cut, glaucous foliage, bearing poppy-like flowers of bright colors. Of easy culture. Sow as early as soil can be worked, where plants are to remain, as they do not bear transplanting well. 1 foot.

- 439 **CALIFORNICA**. Yellow. Pkt. 5 cts.
- 440 **MANDARIN**. Inner side of petals orange; outside scarlet. Pkt. 5 cts.
- 441 **ROSE CARDINAL**. Large, white inside, rose outside. Pkt. 5 cts.
- 442 **MIXED COLORS**. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.
- 443 **ERECTA COMPACTA, ROSE QUEEN**. Rose-carmine. Pkt. 5 cts.



ESCHSCHOLTZIA



GAILLARDIA

EUPHORBIA

Ornamental foliage plant, easily grown from seed. Striking and effective appearance. Hardy annual.

- 452 **VARIEGATA** (Snow-on-the-Mountain). Foliage veined and margined with white. 2 feet. Pkt. 5 cts.

EXACUM AFFINE

- 453 A beautiful annual bearing clusters of fragrant lilac flowers. Very useful for pot culture. 1 foot. Pkt. 25 cts.

FORGET-ME-NOT (Myosotis)

Favorite hardy perennials, mostly treated as annuals, nearly all blooming the first season from seed sown early in the open ground. They succeed to a degree that warrants their cultivation in average soil and open situation, but thrive better in cool, moist soil, considerably shaded. 6 inches.

- 454 **ALPESTRIS** (Blue Alpine Forget-me-not). Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.
- 456 **ELIZA FONROBERT**. Large, sky-blue, with yellow eye; much grown for cutting. Pkt. 5 cts., $\frac{1}{4}$ oz. 30 cts.
- 457 **PALUSTRIS** (True Forget-me-not). Dark blue; blooms the first season. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts.
- 458 **SEMPERFLORENS**. Blue, blooms all season. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts.
- 459 **DISTINCTION**. (Ever-flowering). New; blooms in eight to ten weeks from sowing. Pkt. 10 cts.

FOUR O'CLOCK (Marvel of Peru)

A well-known favorite plant bearing freely funnel-shaped white, red and striped flowers, which open about four o'clock in the afternoon. Will grow anywhere. Plants should be given plenty of room; about 3 feet apart. Hardy annual. 2 feet.

- 465 Mixed Colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

FOXGLOVE. See Digitalis.

GAILLARDIA (Blanket Flower)

Annual Varieties

Very showy, free-blooming, hardy plants of easy culture. Seed germinates very slowly, and should be sown in the house in March. The flowers are very brilliant, borne on long stems. Fine for cutting. 2 feet.

- 470 **PICTA**. Single; mixed colors. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.
- 471 **PICTA LORENZIANA**. Double; mixed colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

Perennial Gaillardia

Hardy perennial Gaillardias thrive in nearly all soils and situations, requiring no protection and almost no care. Flowers large; with rich shades of scarlet, orange and crimson, the three often combined in one flower. Desirable for the perennial border. If sown early, will bloom the first season. 1½ to 2 feet.

- 478 **Newest Varieties**. Mixed. A splendid mixture; comprises all the colorings known. Pkt. 15 cts.



HOLLYHOCK

Helichrysum

(Straw Flower; Everlasting)

One of the best everlasting flowers and an effective bedding plant, succeeding in any well-enriched soil. If flowers are desired for winter use, they should be cut just as the buds are opening. Hardy annual, 2 feet.

515 DOUBLE (*H. monstrosum* fl. pl.). MIXED COLORS. Largest double flowers. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

Heliopsis

516 PITCHERIANA. One of the best hardy perennials for dry soils, and its graceful flowers among the best for cutting. The plant commences to bloom early in season. The flowers are of a beautiful deep yellow, of great substance, and about 2 inches diameter. 3 feet. Pkt. 10 cts.

Heliotrope

A well-known and favorite plant, largely grown in pots, but thriving in the open border; usually grown from cuttings, but grows readily from seed, blooming the first season if sown early. Half hardy perennial.

518 Mixed Colors. All shades. Pkt. 5 cts.

519 Large-flowering. Mixed colors. Heads of flowers nearly double the size of the old sorts. Pkt. 10 cts.

Heuchera

525 SANGUINEA. A fine hardy perennial, bearing in graceful spikes rich crimson flowers. Useful for cutting, and the plant is useful in the mixed border. 1 foot. Pkt. 10 cts.

All seed sold at pkt., oz., or $\frac{1}{4}$ lb. are postpaid at prices quoted herein.

Hollyhock

One of the oldest hardy favorites, greatly improved in recent years, flowers being larger and of better form, and plant of more sturdy growth. While the Hollyhock delights in deep, rich soil, it must be dry or well-drained, or plants will not live through the winter. Though often sown later, seeds should be sown not later than June. As young plants bloom better and are harder, seed should be sown every year. Hollyhocks are most effective planted in long rows. Hardy perennial. 5 to 7 feet.

530 CHATER'S FINEST MIXED. Choicest double varieties, a large percentage of the flowers coming double. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., $\frac{1}{4}$ oz. 40 cts.

531 Double. Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

532 ALLEGHENY. Large semi-double flowers beautifully fringed, of silky texture and richly colored. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

534 EVERBLOOMING HYBRIDS. (Annual Hollyhock). Double, Semi-Double and Single. Mixed. A new strain, blooming the first season from seed. Plants from seed sown inside in March or April will bloom in July and those from seed sown in the open ground, in August, and, in both cases, continuously until frost if main stem is pinched off when 3 or 4 feet high. Pkt. 10 cts.

CHATER'S DOUBLE—535 Maroon. 535A Pink. 536 Snow White. 536A Yellow. Pkt. 10 cts., $\frac{1}{4}$ oz. 50 cts.

Geranium

Well-known, half-hardy, green house perennials, easily raised from seed. Seed sown in the fall or early winter will produce flowers in June, while that from sown in March, plants will not bloom until September, and from seed sown in the open ground in May or June plants will bloom in mid winter.

485 ZONALE (Fish, or Horse-shoe Geranium). Saved from the largest and finest varieties. Pkt. 10 cts.

Globe Amaranth. (Gomphrena)

488 MIXED COLORS. A tender annual plant, bearing globe-shaped, everlasting flowers, often used, when dried in winter bouquets. Blooms freely and is an excellent bedding plant. 1½ feet. Pkt. 5 cts.

Gloxinia

One of the most beautiful greenhouse perennials. May be successfully grown by the amateur. Give them a porous and well-enriched soil; a warm, moist atmosphere, and as soon as they begin to flower remove them to a cooler house, and afterwards dry them off gradually and keep them free from moisture till they again begin to grow. The seeds are small and should be sown on an even surface and but slightly covered.

489 SPLENDID MIXED. A mixture of all classes, unrivaled in richness of colors. Pkt. 25 cts.

Godetia

A showy and beautiful hardy annual, bearing freely large, delicately shaded, satiny flowers; of easy culture, blooms best in rather poor soil. Seed may be sown in the open ground, or sown in the house in March and transplanted to the open ground as soon as danger of frost is past. The plants require plenty of room. Close planting weakens them.

490 MIXED COLORS. Includes all varieties and the latest introductions. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Gourds

Ornamental, tender annual climbers, with curiously formed and colored fruit; of very rapid growth; useful for covering unsightly objects. 10 to 20 feet.

491 Apple-shaped. Small, striped. Pkt. 5 cts.

492 Dipper. Pkt. 5 cts.

494 Egg-shaped. Pkt. 5 cts.

495 Hercules' Club. 4 feet long. Pkt. 5 cts.

496 Miniature Bottle-shaped. Pkt. 5 cts.

497 Orange-shaped. Pkt. 5 cts.

498 Pear-shaped. Green, white-striped. Pkt. 5 cts.

499 Serpent. Striped. 5 feet long. Pkt. 5 cts.

500 Mixed Varieties. Small sorts. Pkt. 5 cts., oz. 15 cts., $\frac{1}{2}$ oz. 10 cts., oz. 15 cts.

Gypsophila. (Baby's Breath)

Very graceful, free-blooming plants of easiest culture. Flowers very small, borne in loose, graceful panicles. Very largely used in bouquets with other cut-flowers such as Sweet Peas, Roses, Carnations, etc. 2 feet.

505 ELEGANS GRANDIFLORA ALBA. White. An improved form of the annual Gypsophila. Grown by the acre for the London and Paris flower markets. Blooms quickly after sowing; several sowings should be made. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

506 PANICULATA. White. The variety more generally known as Baby's Breath. Hardy perennial. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts.

Helenium

A very valuable hardy perennial, bearing in profusion in August and September, long-stemmed single flowers: fine for cutting. Effective as a background.

510 AUTUMNALE SUPERBUM. Deep golden yellow 5 to 6 feet. Pkt. 10 cts. HELIANTHUS. See Sunflower.



HELIANTHUS

Humulus. (Hop)

Rapid-growing climbers, with attractive foliage, especially valuable because seldom injured by insects or drought. The Japanese variety is a hardy annual, and among the best for quickly covering unsightly objects. The *Lupulus*, or Common Hop, is a hardy perennial, easily grown from seed, and when established, of very rapid growth. 10 to 20 feet.

537 **VARIEGATA.** Variegated foliage, green and white. Pkt. 5 cts.
 538 **LUPULUS.** The Common Hop. Pkt. 5 cts.

Hunnemannia

540 **FUMARIÆFOLIA** (Giant Tall Poppy, or Bush Eschscholtzia). A valuable plant of the Poppy family, closely allied to the Eschscholtzia. A perennial, always treated as an annual, blooming by middle of July from seed sown early in May, and continually until frost. The large flowers are of a deep, rich yellow, borne on very long stems and last a remarkably long time after cutting. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

HYACINTH BEAN. See *Dolichos*.

Iberis

543 **SEMPERVIRENS** (Perennial Candytuft). A desirable hardy perennial of easiest culture. Dwarf spreading habit; suitable for rockeries. Flowers pure white. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts.

Ice Plant

(*Mesembryanthemum*)

546 **CRYSTELLINUM.** A trailing plant, with succulent stems and leaves. Excellent for hanging baskets and rockwork. Tender annual. 9 inches. Pkt. 5 cts.

Ipomoea

The *Ipomoea* family includes the well-known Morning-glory, the Moonflower and the Cypress Vine. Rapid-growing climbers of easiest culture; bloom earlier and more profusely on rather poor soil but of higher growth and more attractive foliage when grown on rich soil. Tender annuals. 15 to 30 feet.

550 **BONA NOX** (Evening Glory). Beautiful, large, violet-blue flowers which open at night. Of extremely rapid growth. Pkt. 5 cts.
 551 **COCCINAE** (Star Ipomoea). Small scarlet flowers, borne in profusion. Pkt. 5 cts.,
 552 **SETOSA** (Brazilian Morning-Glory). A handsome variety of luxuriant growth, having very large three-lobed leaves, the under side and stem being thickly set with small reddish hairs. Flowers are a pleasing rose, about 2½ inches across, of delicate satiny texture and borne in clusters, but one or two in each cluster opening at once. Pkt. 10 cts.

553 **RUBRA COERULEA** (Heavenly Blue). Large, heart-shaped leaves; flowers 4 to 5 inches across, borne in clusters and in such profusion as to nearly cover the foliage; bright sky-blue. Pkt. 10 cts.

Kochia

556 **TRICOPHYLLA** (Summer Cypress). A very quick-growing annual; cultivated for its beautiful foliage, which is feathery and fine as moss. Through the summer this is bright green, but commences in early fall to gradually take on a red tinge, becoming entirely red before it dies. The brilliant coloring has given it its other two common names of Mexican Fire Plant and Burning Bush. It is often grown in rows as low hedges. Seed may be sown in the open ground about May 1. Hardy annual. 2½ feet. Pkt. 10 cts.

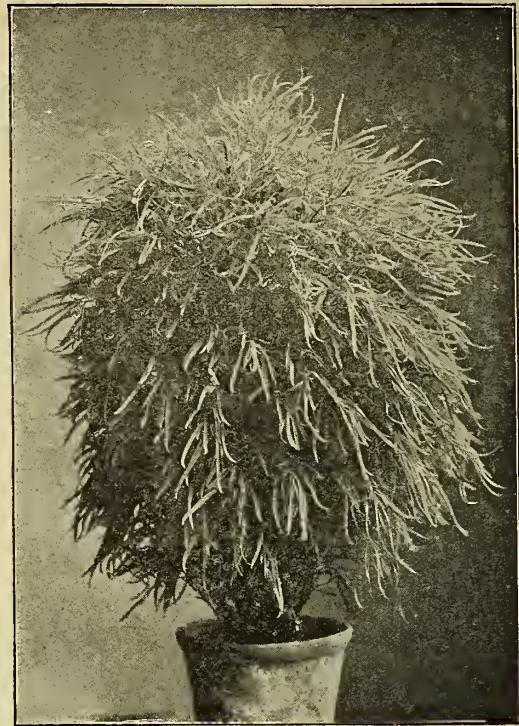
Kudzu Vine. (Pueraria)

560 **THUNBERGIANA.** (Jack-and-the-Beanstalk Vine). A vine of wonderfully rapid growth, when well established growing to the great height of 40 to 50 feet. Leaves are of enormous size. One of the best for forming a screen for any purpose. In the North, the plant dies to the ground in the winter, but in the South becomes woody. Hardy perennial. Pkt. 10 cts.

LARKSPUR. See *Delphinium*.



HELIOTROPE



KOCHIA

Lantana

A favorite plant of rapid growth, blooming continually through the summer; desirable for the garden or house. Tender perennial. 2 feet.

562 **Mixed Colors.** Pkt. 5 cts.

Lathyrus latifolius

(Everlasting Sweet Pea)

An easily grown hardy perennial climber, bearing freely, flowers somewhat similar in form to the Sweet Pea. If grown on moist soil, will bloom nearly all summer. Colors, reddish purple, rose and white. 6 to 8 feet.

570 **Mixed Colors.** Pkt. 5 cts., $\frac{1}{2}$ oz. 20 cts., oz. 35 cts.

Lavender. (Lavendula Vera)

575 **VERA.** A well-known hardy perennial grown chiefly for its lasting fragrance. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

Lavatera Tremestrис

Beautiful and effective hardy annual, covered during the entire summer with pretty and showy blossoms.

576 **Rose pink.** 577 **White.** Pkt. 5 cts., oz. 30 cts.

Linum. (Scarlet Flax)

580 **GRANDIFLORUM** (Scarlet Flax). A hardy annual of slender habit, bearing in profusion brilliant scarlet-crimson flowers. An effective bedding plant. 1 foot. Pkt. 5 cts.

Lobelia

Pretty little plants of easy culture, blooming profusely from June until frost. The dwarf varieties are useful for bedding and edgings, the trailing variety is excellent for hanging-baskets, vases and rock-work. Half-hardy annuals.

585 **CRYSTAL PALACE COMPACTA.** Rich blue flowers, dark foliage. Pkt. 10 cts.
 586 **WHITE GEM.** White Dwarf; very profuse. Pkt. 10 cts.
 587 **GRACILIS.** Light blue, trailing. Pkt. 5 cts.

LOVE-IN-A-MIST. See *Nigella*.

Lupin

590 **Annual Varieties, Mixed.** Easily grown plants, with long, graceful spikes of pea-shaped flowers of various colors. 2 feet. Pkt. 5 cts., oz. 20 cts.

591 **Perennial Varieties, Mixed.** Hardy plants of easy culture, useful as a background in the perennial border. Mixed blue and white. 3 to 4 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts.

Lychnis

Perennial plant of easy culture, blooming the first season if sown early.

595 **CHALCEDONICA** (Burning Star). Bright scarlet flowers shaped like Maltese cross. Of fine color and thrifty growth; very effective in the perennial border. 2 feet. Pkt. 5 cts.



MARIGOLD

Matricaria (Feverfew)

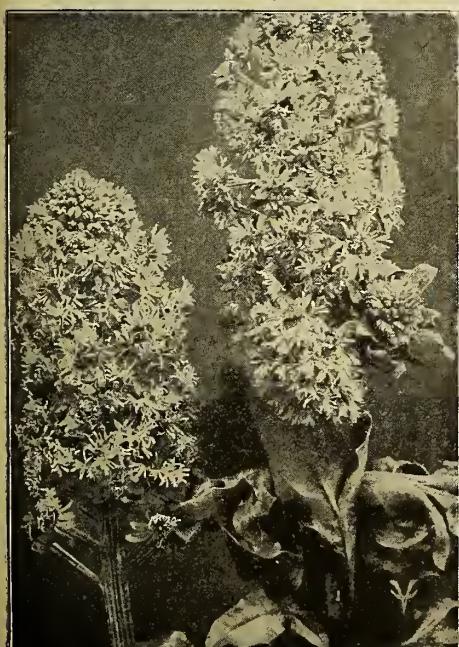
Free-flowering annuals, useful for groups, borders, or pot culture. Fine for cut flowers.
1½ feet.

611 DOUBLE WHITE. Pkt. 10 cts., ¼ oz. 30 cts.
612 DOUBLE YELLOW. Pkt. 10 cts., ¼ oz. 75 cts.

Mignonette. (*Reseda odorata*)

A well-known and popular hardy annual, prized for its delightful fragrance. Seeds sown in autumn will bloom in early spring, and when sown the last of July will come into flower in a few weeks and continue until cut down by frost.

615 GRANDIFLORA. Improved, large-flowered, Sweet Mignonette. Pkt. 5 cts., ½ oz. 10 cts., oz. 15 cts.
616 DEFIANCE. Large spikes and extra-large individual florets. Pkt. 5 cts., ¼ oz. 15 cts., oz. 50 cts.
617 GIANT PYRAMIDAL (Crimson Giant). Of branching growth; large, of reddish cast. Pkt. 5 cts., ¼ oz. 10 cts., oz. 30 cts.
618 GOLDEN QUEEN. Golden yellow. Pkt. 5 cts., ¼ oz. 10 cts., oz. 30 cts.
619 MACHET. Large, thick spikes of reddish cast, of dwarf habit, dark foliage. One of the best for pots. Pkt. 5 cts., ¼ oz. 15 cts., oz. 40 cts.
620 PARSON'S WHITE. Nearly white. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts.
621 VICTORIA. Of deep reddish cast. Pkt. 5 cts., ¼ oz. 10 cts., oz. 30 cts.
625 MIXED VARIETIES. The above and other varieties. Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts.



MIGNONETTE

Marigold

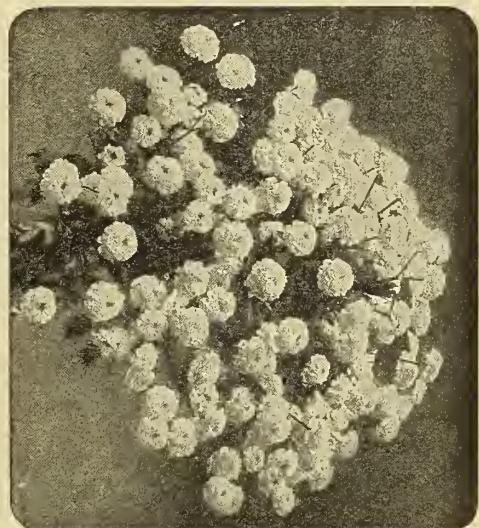
Favorite annual plant blooming the entire summer; easily cultivated. The African varieties bear large yellow or orange flowers and the plants are usually tall. The French type is of dwarf habit and flowers are striped. Hardy annual, 1 to 3 feet.

600 AFRICAN EL DORADO. Flowers very large, extremely double, of various shades of yellow. Pkt. 5 cts., ¼ oz. 15 cts.
601 LEMON BELL. New. The largest of all Marigolds, nearly ball-shaped; pure lemon-yellow. Pkt. 10 cts.
602 ORANGE PRINCE. New. Large, rich orange. Pkt. 10 cts.
603 DOUBLE MIXED. All shades of the African type. Pkt. 5 cts., ¼ oz. 15 cts.
606 FRENCH DWARF DOUBLE, GOLD STRIPED. Deep brownish red, striped yellow. Pkt. 5 cts.
607 FRENCH DOUBLE, MIXED. Pkt. 5 cts., ¼ oz. 15 cts.
608 LEGION OF HONOR. Single flower; golden yellow, with a large spot of crimson. Pkt. 5 cts.

Mathiola Bicornis

(Night Scented Stock)

610 A hardy annual with purplish red flowers giving forth a delightful fragrance especially towards evening. 1 foot. Pkt. 5 cts., ¼ oz. 15 cts.



MATRICARIA

Mimulus

Showy, free-flowering plants of easy culture. Half-hardy perennials, blooming the first season by July, if started early in the house, and continually until October. Thrives best in moist soil and somewhat shaded location. 1 foot

630 TIGRINUS (Monkey Flower). Handsome flowers with white, sulphur or yellow ground spotted with crimson, scarlet or pink. Pkt. 5 cts.
631 MOSCHATUS (Musk Plant). Small yellow flowers, musk-scented foliage, of trailing habit; excellent for hanging baskets. Pkt. 5 cts.

Moonflower. (*Ipomoea*)

635 GRANDIFLORA ALBA (*Ipomoea noctiflora*). A very rapid-growing variety of *Ipomoea*, reaching the height of 30 feet. Large white flowers, open in the evening and on cloudy days. Germination is greatly assisted if the hard shell of the seed is cut. Plant about 1 inch deep, in moist soil, in a box or seed-pan, and set in a warm place. If soil is kept moist the seed will germinate in about two weeks. Set out the young plants as soon as all danger of frost is past, selecting a warm, sunny location. Pkt. 10 cts.
635B PINK HYBRID MOONFLOWER. In color, exquisite, soft lilac-pink. Of much easier cultivation than the preceding. Seeds germinate freely and plant commences to bloom profusely nearly as soon as the Morning Glory. Vines are of most rapid growth, and will cover as much or more space than any other Moonflower, having enormous leaves. Blooms very profusely and will succeed wherever the Morning Glory will. Pkt. 10 cts., ¼ oz. 25 cts.

Morning Glory (*Convolvulus major*)

A well-known climbing vine of easiest culture. Hardy annual. 10 feet.
636 MIXED COLORS. Pkt. 5 cts., ½ oz. 10 cts., oz. 15 cts.
637 JAPANESE GIANT MORNING-GLORIES. The flowers of this strain are much larger than those of the common type, the range of colorings much greater, while the foliage is greatly varied and very attractive. The colors range from deepest purple through all shades of blue and red to pure white, in a great variety of beautiful blendings and markings. The vine is not so hardy nor so vigorous in its growth as the common type. Germination is assisted by soaking the seed in water for twenty-four hours before sowing. Tender annual. 8 feet.
Pkt. 5 cts., ½ oz. 15 cts., oz. 25 cts.
MORNING BRIDE. See Scabiosa.
MUSK PLANT. See Mimulus.

NASTURTIUM

No other annual plant combines in so great a degree ease of culture, profusion of bloom; and grace and beauty of flowers as the Nasturtium. Also, it thrives on all soils except that which is very wet and succeeds on soil so poor that many other plants would fail to grow at all.

Tall Nasturtium

(*Tropaeolum majus*)

- 640 ATROPPURPUREUM. Rich, dark crimson.
- 641 BUTTERFLY. Light lemon-yellow, lower petals blotched with terra-cotta; upper petals marked bright red.
- 642 CHAMELEON. Varies in color and markings of flowers on the same plant.
- 644 COCCINIA. Bright scarlet.
- 645 CROESUS. Ground color light primrose to deep orange, upper petals blotched crimson; lower petals heavily fringed at throat and blotched brownish-red.
- 646 DUNNETT'S ORANGE. Bright orange, blotched red.
- 648 EDWARD OTTO. Brownish lilac.
- 650 GOLDEN-LEAVED SCARLET. Deep scarlet; light yellowish foliage.
- 652 HEINEMANNI. Chocolate-color.
- 654 HEMISPHERICUM. Straw-color, blotched rose.
- 656 KING THEODORE. Deep crimson-maroon, dark foliage.
- 658 LUTEUM. Clear light yellow.
- 662 PEARL. Very pale yellow, nearest approach to white.
- 664 REGELIANUM. Deep crimson-violet.
- 666 SALMON QUEEN (Improved Vesuvius). Rich, but soft velvety salmon; dark foliage.
- 668 SUNLIGHT. Giant flower, rich golden yellow.
- 669 TWILIGHT. Faint salmon, or buff, heavily suffused with rosy salmon. Extra-large.
- 670 VON MOLTKE. Bluish rose.
Each of the preceding varieties, ptk. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 40 cts.
- 672 CHOICE MIXED. Many varieties; a wide range of colors. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., $\frac{1}{4}$ lb. 25 cts., lb. 75 cts. See also, Worcester Mixed Tall Nasturtiums.
- 673 GIANT-FLOWERED TALL NASTURTIIUMS, MIXED. A choice selection of the largest flowered varieties and seedlings. Especially desirable for exhibition. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., 2 ozs. 40 cts., $\frac{1}{4}$ lb. 65 cts.

Lobb's Tall Nasturtium

(*Tropaeolum Lobbianum*)

While both flowers and foliage are slightly smaller than those of the preceding common Nasturtium, this class is preferred by many because of the greater profusion of bloom and its more brilliant coloring.

- 675 ASA GRAY. Light yellow, almost white.
- 677 BLACK PRINCE. Very dark, nearly black. Foliage dark.
- 679 BRILLIANT. Dazzling scarlet.
- 680 CARDINALE. Rich, cardinal-red.
- 681 FIREFLY. Deep orange, spotted red.
- 683 GIANT OF BATTLE. Light yellow, spotted red.
- 685 GOLDEN QUEEN. Clear golden yellow.
- 687 KING OF THE BLACKS. Deep, rich maroon; dark foliage.
- 689 LUCIFER. Deep scarlet, dark foliage.
- 691 MONSIEUR COLMET. Brownish purple.
- 693 NAPOLEON III. Golden yellow, spotted brown.
- 695 REGINA. Brilliant salmon, changing to deep cream.

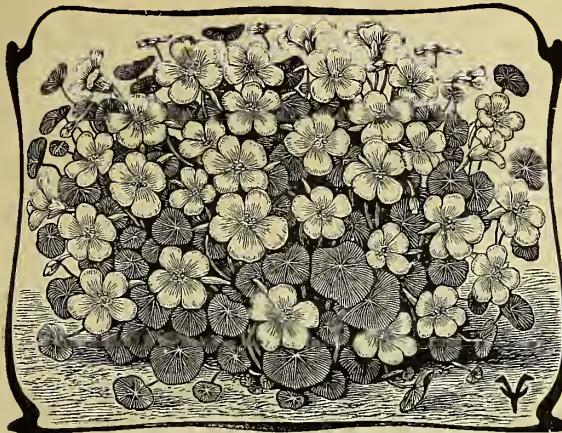


NASTURTIUM



NASTURTIUM

- 697 RUDOLPH VIRCHOW. Rich carmine-rose, beautiful.
Price of each above, ptk. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.
- 698 Collection of the above, one package of each, 13 varieties, no further discount, 40 cts.
- 700 LOBBIANUM. Choicest mixed. A mixture of all varieties of this desirable class. Pkt. 5 cts., oz. 12 cts., 2 ozs. 20 cts., $\frac{1}{4}$ lb. 30 cts., lb. \$1.00.
- 701 MADAME GUNTHER HYBRIDS. A very choice strain of the Lobbianum type, unsurpassed for diversity and richness of colors, comprising many new combinations of colors not found in any other class. The foliage is mostly dark and forms a pleasing contrast to the richly colored flowers. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts.
- 702 "IVY-LEAVED." A new type of Tall Nasturtium. An entirely distinct type from this popular flower, having leaves which resemble those of the English Ivy and flowers with narrow petals set well apart, which give them a somewhat star-like appearance. In this mixture will be found nearly all colors of the regular types. Pkt. 10 cts., $\frac{1}{2}$ oz. 15 cts., oz. 20 cts., 2 ozs. 30 cts., $\frac{1}{4}$ lb. 50 cts.
- 705 WORCESTER MIXED TALL NASTURTIIUMS. Our own mixture of many varieties; comprises selections from all classes including the New Variegated-Leaved, or Queen, and choice mixtures from different growers. Of the greatest possible diversity of colors and types but well-balanced, including larger proportions of the most desirable varieties. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.



NASTURTIUM, SNOW QUEEN

Dwarf, or Tom Thumb Nasturtiums

While the flowers not having as long stems are perhaps not quite as desirable for cutting as those of the Tall Nasturtium, the Dwarf Nasturtium is not surpassed by any other annual plant for bedding, being of the easiest culture, thriving in nearly all soils and blooming profusely the entire season.

A packet of Nasturtium contains from 30 to 45 seeds.

Except where otherwise noted, all of the following varieties at uniform price.

Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., 1/4 lb. 40 cts.

710 AURORA. Bright primrose, veined carmine.

712 BEAUTY. Orange with scarlet markings.

714 BRONZE-COLORED. A very distinct and peculiar shade.

716 CHAMELEON. Flowers of different colors or markings on the same plant.

718 CLOTH OF GOLD. Brilliant scarlet, foliage golden yellow.

720 CÆRULEUM ROSEUM. Rose, with bluish tinge.

722 CRYSTAL PALACE GEM. Rich sulphur-yellow, spotted carmine.

724 EMPRESS OF INDIA. Dark scarlet, foliage distinct, dark purplish green.

726 GOLDEN KING. Rich golden yellow.

727 GOLDEN MIDNIGHT. Flowers intense, deep maroon, almost black; a striking contrast to the light green foliage. Pkt. 10 cts., oz. 25 cts.

728 GOLDEN QUEEN. Both flowers and foliage yellow.

730 KING THEODORE. Dark maroon; dark foliage.

732 KING OF TOM THUMBS. Rich scarlet, dark foliage.

734 LADY BIRD. Orange-yellow, suffused red; blotched brighter red at base of petals.

736 PEARL. Light cream, nearly white.

738 PRINCE HENRY. Light straw-yellow spotted and suffused with rose.

742 RUBY KING. Ruby-red, dark-leaved.

743 SPOTTED KING. Yellow, with brown spots.

743b SNOW QUEEN. A charming Lilliput. The flowers, when first opened, are of a yellowish tinge, which soon turns to white at the edges, and on the second day, the whole flower becomes pure white. An excellent bedding variety. Pkt. 10 cts.

744 VESUVIUS. Rich salmon-pink.

746 CHOICE MIXED. While not equal to the Worcester Mixed, of a wide range of colors and will give very pleasing results. Pkt. 5 cts., oz. 10 cts., 2 ozs. 15 cts., 1/4 lb. 25 cts., lb. 75 cts.

747 WORCESTER MIXED DWARF NASTURTIUMS. Like the Worcester Tall Mixed this is of our own preparation and cannot be surpassed in diversity of colors and types; includes all the named varieties and classes here described and other choice mixtures of noted growers. Pkt. 5 cts., oz. 15 cts., 2 ozs. 25 cts., 1/4 lb. 40 cts., lb. \$1.25.

748 QUEEN OF TOM THUMBS. A new dwarf variety, with beautiful foliage variegated silvery white and light green. The plant does not grow over 9 inches high. The flowers are rich brilliant crimson, rather small, but show to great advantage with the beautiful foliage as a background. One of the best easily grown plants for an edging and very effective grown in masses. Pkt. 10 cts., 1/2 oz. 20 cts., oz. 35 cts.

749 VARIEGATED-LEAVED, or QUEEN OF TOM THUMBS, MIXED. A mixture of all the varieties yet named and several unnamed seedlings of this new, distinct and charming type. Of various distinct colors shades—light-primrose, deep scarlet, crimson, and deep orange more or less veined or spotted with other colors. Pkt. 10 cts., 1/2 oz. 15 cts., oz. 25 cts.

750 DWARF GOLDEN LEAVED NASTURTIUM, IN MIXTURE. A mixture of seven varieties, with yellow or golden leaves, including the new Golden Midnight, recently introduced. Pkt. 10 cts., 1/2 oz. 15 cts., oz. 25 cts.

751 DWARF IVY-LEAVED. Like the Tall Ivy-Leaved, this comprises a wide range of colors and is a charming acquisition. Pkt. 10 cts., 1/2 oz. 15 cts., oz. 25 cts., 2 ozs. 45 cts., 1/4 lb. 75 cts.

Nemesia

A very valuable introduction—long blooming annual with large flowers varying from creamy white to deep orange and carmine. Most useful for bedding. 1 1/2 feet.

756 STRUMOSA SUTTONI. Pkt. 15 cts.

Nemophila. (Love Grove)

An attractive hardy annual, bearing cup-shaped flowers about an inch in diameter, usually in shades of blue and white, often spotted with brown. Seeds in cool, shaded places, in light, but rather moist loam. 6 inches.

757 MIXED. Pkt. 5 cts., oz. 25 cts.

Nicotiana

(Flowering Tobacco)

Handsome, effective, half-hardy annuals, blooming profusely the entire season, and thriving in all soils. Seed may be sown early in the house, or in the open ground as soon as the soil is warm.

758 AFFINIS. White, star-like flowers, deliciously fragrant, expands fully in the evening. 2 to 3 feet. Pkt. 5 cts.

759 SANDERÆ. Rose-carmine; remarkably profuse in bloom. Unlike the Affinis, is in full bloom during the day. 3 to 3 1/2 feet. Pkt. 10 cts.

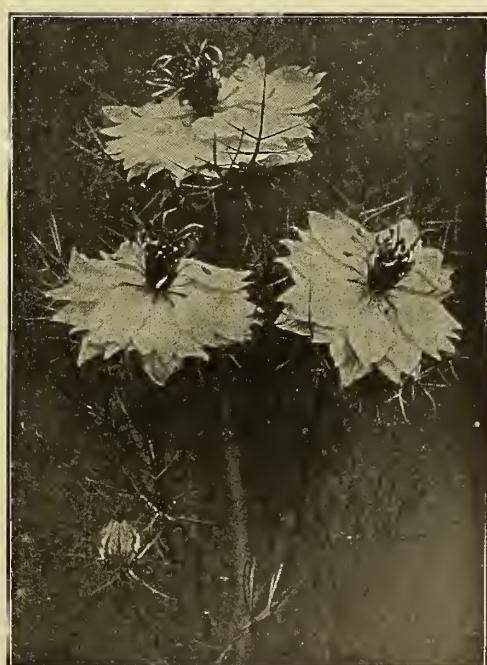
760 SANDERÆ HYBRIDS. New hybrids, comprising several distinct colors or shades. Pkt. 10 cts.

Nigella

Love-in-a-Mist; Lady-in-Green; Devil-in-a-Bush

A favorite hardy annual of the easiest culture. The blue or white flowers are half hidden in the abundant finely cut foliage, hence its common names. 1 to 1 1/2 feet.

761 Blue and White, Mixed. Pkt. 5 cts.



NIGELLA

Pansies

Sow Pansy seed in August or September, in fresh, moist soil, cover lightly and press seeds in with a board. Keep the bed moist by watering, and if the weather is hot and dry, by mulching with straw or by shading with cloth. The seeds will germinate in about two weeks, when the straw or cloth should be removed. In from four to six weeks, transplant to a slightly raised bed, setting the plants about 3 inches apart each way. Protect during winter with straw or leaves, and transplant to desired location early in the spring. Seed may be sown in the open ground in the spring as soon as soil can be fitted. A much earlier sowing can be made in a coldframe, but is not necessary. The ideal location is one somewhat sheltered from the wind, which has the morning sun and is shaded during the hottest part of the day. Seed sown in June in a cool place will make fine blooming plants by fall, when the weather is cool and the Pansy blooms best.

The seed which we offer of the choicest strains is of unsurpassed quality. Other strains at lower prices are of excellent quality, comprising every color and extra-large flowers.

Note that our packets of Pansy seeds are larger than usually offered, rarely containing less than 200 seeds, and more often 250 to 350. Beautiful flowers, with broad blotches, of largest size, finest form and remarkable substance.

770 BUGNOT'S SUPERB BLOTTED. Rare shades of red bronze or brown. Pkt. 25 cts., $\frac{1}{8}$ oz. 80 cts., $\frac{1}{4}$ oz. \$1.40, oz. \$5.

771 CASSIER'S GIANT BLOTTED. A very carefully selected strain of five blotched varieties, remarkable for the enormous size of the flowers and the many rare combinations of shades and colors. Pkt. 25 cts., $\frac{1}{8}$ oz. 80 cts., $\frac{1}{4}$ oz. \$1.40, oz. \$5.

772 ODIER LARGE-FLOWERED BLOTTED. Very choice strain of three-and-five-blotched varieties. Pkt. 15 cts., $\frac{1}{8}$ oz. 50 cts., $\frac{1}{4}$ oz. 90 cts., oz. \$3.50.

773 TRIMARDEAU GIANTS. Flowers of the largest size, with a dark blotch on the three lower petals. Pkt. 10 cts., $\frac{1}{8}$ oz. 35 cts., $\frac{1}{4}$ oz. 60 cts., oz. \$2.

774 TRIMARDEAU PARISIAN, LARGE-STAINED. A beautiful improved strain mostly white ground and five-blotched varieties. Pkt. 15 cts., $\frac{1}{8}$ oz. 40 cts., $\frac{1}{4}$ oz. 75 cts., oz. \$2.50.

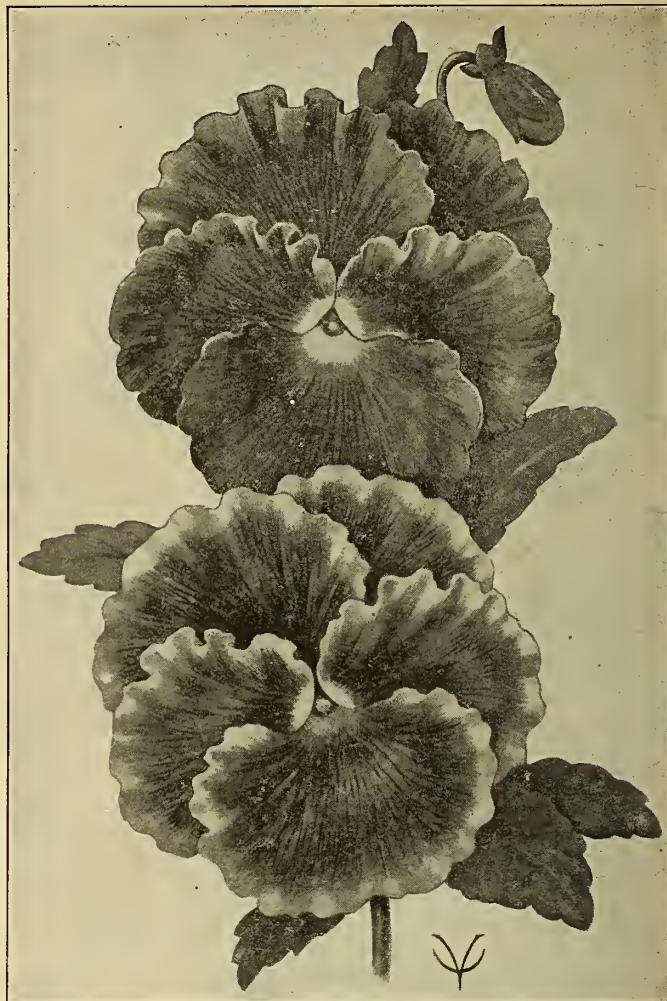
776 MADAME PERRET (Phenomena). A new strain, distinctly beautiful pink, blotched or veined with rose, crimson or purple, the upper petals either self-colored with rich wine-red or deep purple, or with a margin of white. Pkt. 15 cts., $\frac{1}{8}$ oz. 50 cts., $\frac{1}{4}$ oz. 90 cts., oz. \$3.50.

778 MASTERPIECE (Germania). Ruffled Pansies. A new strain, having ruffled and curled petals, giving the flowers the appearance of being double. Colors rich and striking. Pkt. 20 cts., $\frac{1}{8}$ oz. 70 cts., $\frac{1}{4}$ oz. \$1.25, oz. \$1.50.

779 WORCESTER GIANT MIXED. Our own selection of choice large-flowered strains and varieties, including a proportion of all the preceding strains, the named separate sorts, and several choice strains from different growers. Wonderful colors, shades and markings; representing nearly every type of Pansy. Pkt. 15 cts., $\frac{1}{8}$ oz. 60 cts., $\frac{1}{4}$ oz. \$1, oz. \$3.75.

780 ROSS' SELECTED GIANT MIXED.

782 LARGE FLOWERED MIXED. Our own mixture of varieties. The range of colorings is excellent, and the mixture will be found very satisfactory. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts., oz. \$1.75.



PANSY

- 783 ENGLISH PRIZE MIXED.** Includes many with face-like markings of various shades. Pkt. 5 cts., $\frac{1}{8}$ oz. 30 cts., oz. \$1.
- 785 CHOICE MIXED.** A mixture of many varieties. Pkt. 5 cts., $\frac{1}{8}$ oz. 25 cts., oz. 85 cts.
- 786 GIANT ADONIS.** Splendid light blue, with white center and dark blotches.
- 788 EMPEROR WILLIAM.** Ultramarine-blue, with dark center.
- 790 FREYA (Silver-edged.)** Very fine.
- 792 GOLDEN QUEEN.** Pure yellow. $\frac{1}{8}$ oz. 50 cts.
- 794 INDIGO-BLUE.** New rich shade.
- 796 KING OF THE BLACKS.**
- 798 LIGHT BLUE.**
- 800 LORD BEACONSFIELD.** Violet, shading to white at the top.
- 802 MAUVE QUEEN.** New, beautiful mauve. $\frac{1}{8}$ oz. 60 cts.
- 804 PEACOCK.** Rich blue and purple, edged white; very striking.
- 806 RUBY KING.** Superb reddish shades. $\frac{1}{8}$ oz. 50 cts.
- 808 SNOWFLAKE.** Pure white.
- 810 STRIPED.** Rich, dark shades.
- 811 YELLOW.** With large, black eye.

Each of the 14 varieties, except where noted, pkt. 10 cts., $\frac{1}{8}$ oz. 40 cts.



PETUNIA

836 Imported Collection. Twelve colors. Pkt. 60 cts.
DWARF. (*P. Drummondii nana compacta*). The plants of this class, growing only 6 or 8 inches high, are considered by many very desirable for bedding
 837 FIREBALL. Bright scarlet. Pkt. 10 cts.
 838 SNOWBALL. Pure white. Pkt. 10 cts.
 840 Mixed Colors. All choice varieties. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts.
LARGE-FLOWERING DWARF. A new strain, combining the large heads and individual flowers of the Grandiflora type, with the dwarf compact habit of the *Nana compacta*.
 841 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts.
STAR, or FRINGED (*P. Drummondii cuspidata*). A distinct class with petals partly fringed, partly toothed, and some longer than others and regularly placed, give the flowers a star-like shape. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts.
 843 Mixed Colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts.
DOUBLE. Double and semi-double flowers. A very desirable class for cutting.
 845 Mixed Colors. Pkt. 10 cts.
HARDY PERENNIAL PHLOX. Well-known, popular herbaceous, perennial, easily grown from seed.

Poppy

Well-known hardy plants of quick growth, blooming profusely for a considerable time, thriving best on light, sandy loam. Seed of the annual varieties should be sown as early in the spring as possible and where desired to bloom as they do much better when they start to grow in cool weather and are very difficult to transplant. The seed is fine and should be only slightly covered. The period of bloom will be considerably prolonged if all the flowers are cut or not allowed to form seed-pods. They will last much longer if cut when just opening.

Single Annual Poppies

860 **ADMIRAL.** Large, single, peony-flowered variety, glistening white, with broad band of brilliant scarlet at the top. Pkt. 10 cts.
 862 **DANEBROG or DANISH CROSS.** Brilliant scarlet with white spots at base of each petal. Pkt. 5 cts.
 863 **MEPHISTO.** Beautifully fringed, usually brilliant scarlet with black spots, but varies to rose and white. Pkt. 5 cts.
 864 **MISS SHERWOOD.** Fine large flower, satiny white with upper half delicate rose, a distinct and beautiful combination of unusual value. Excellent for cutting. Pkt. 10 cts.
 866 **THE BRIDE.** Large, pure white. Pkt. 5 cts.
 868 **TULIP-FLOWERED.** Bright scarlet, cup-shaped flower. Pkt. 5 cts.
 870 **SHIRLEY.** A lovely strain, comprising many delicate and rich shades, ranging from pure white through pink, rose, scarlet and red to the deepest crimson, the darker shades often having a margin of white. Many of the flowers have crimped or wavy petals, all are of fine silky texture, but of good substance, and not surpassed by any for cutting. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.
 872 **SHIRLEY, SANTA ROSA STRAIN.** Acknowledged the best and most varied strain in existence. Unusually large flowers, remarkably clear colors, including new striped, new salmon shades and new bluish ones, all mixed. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts.
 874 **UMBROSUM.** Rich vermillion, with a spot of glistening black on each petal. Very showy. Pkt. 5 cts.

Petunia

The Petunia is easily grown, and, blooming profusely all summer, is very popular for bedding. It thrives best in a warm, sunny location. Sow seed thinly where plants are to remain, in beds for transplanting, or, for early blooming, in the house in boxes. Almost invariably the weaker plants produce the finer flowers, especially of the choice strains.

812 **MIXED COLORS.** A fine mixture of the common small-flowered type. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.
 814 **FINEST MIXED.** A superior mixture. Pkt. 10 cts., $\frac{1}{2}$ oz. 20 cts., $\frac{1}{4}$ oz. 30 cts., oz. \$1.
 815 **STRIPED and BLOTTCHED, MIXED.** A choice strain. Pkt. 10 cts., $\frac{1}{2}$ oz. 25 cts., $\frac{1}{4}$ oz. 40 cts.
 816 **HOWARD'S STAR.** Rich shade of maroon, with five-pointed star of white. Very pretty. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts.
 817 **DWARF INIMITABLE, MIXED COLORS.** Dwarf, bushy plants, flowers mostly beautifully striped and blotched. Pkt. 10 cts., $\frac{1}{2}$ oz. 40 cts.
 818 **PETUNIA, ROSY MORN.** A single flower, color soft carmine pink. A profuse bloomer. Pkt. 10 cts., $\frac{1}{2}$ oz. 50 cts.
 822 **LARGE-FLOWERING EXTRA CHOICE, MIXED.** A superior mixture of large-flowered varieties with beautiful markings. Pkt. 20 cts.
 824 **GIANTS OF CALIFORNIA.** A superb strain. Flowers are of remarkable substance, enormous size and many are beautifully fringed. Of almost every conceivable shade; veined, striped or blotched with some contrasting shade. Plant of vigorous growth and blooms profusely. Pkt. 25 cts.

Phlox Drummondii

A well-known and very popular hardy annual, blooming profusely from July until frost, and of the easiest culture. Seed may be sown in the open ground early in the spring, either where the plants are desired to bloom, or in beds, and the young plants set in the desired location when 2 or 3 inches high. The tall sorts should stand about 12 inches apart, the dwarf about 6 inches. The plants will be more bushy and cover the ground better if pinched off while small.

830 Mixed Colors. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.
LARGE-FLOWERING (*Phlox Drummondii grandiflora*). A great improvement on the common type, both heads and florets being nearly twice as large.
 831 Extra-Choice, Mixed Colors. Our own mixture of the choicest and best strains from different growers. Pkt. 10 cts., $\frac{1}{4}$ oz. 30 cts., oz. \$1.

847 Choicest Mixed. Saved from only the finest varieties. All colors. Pkt. 10 cts., $\frac{1}{2}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.
PINK. See Dianthus.

Platycodon. Chinese Bellflower

855 **Grandiflorum.** One of the best hardy perennials, and one of the easiest grown, its propagation being more easily accomplished by seed than by division of the root. It forms large clumps and is well adapted to the hardy border. Blooms from July to September. The flowers are large steel-blue, rather more open than bell-shaped, 2 to 2½ feet. Pkt. 10 cts.

Polemonium. Jacob's Ladder

857 **CERULEUM.** A hardy perennial, very popular in olden times. Easily grown from seed, preferably sown in the fall. Large heads of showy blue flowers from May to August. 2 feet. Pkt. 5 cts.



POPPY

DOUBLE ANNUAL POPPIES

878 CARNATION-FLOWERED. Mixed. Fine, large, fringed flowers, of many colors. A. popular class. Pkt. 5 cts., oz. 20 cts.

880 CARDINAL. Very large, pure cardinal-red; deeply cut, dark green foliage; very attractive Pkt. 5 cts.

882 GOLDEN POPPY. Striking golden yellow foliage, and flowers in different shades of red. Pkt. 10 cts.

884 PEONY-FLOWERED. Mixed. Large, globular flowers resembling a peony. Pkt. 5 cts., oz. 20 cts.

886 SNOWDRIFT, or DOUBLE WHITE FRINGED. Flowers from 3 to 4 inches across, very double and finely fringed. Pure white. Pkt. 5 cts.

888 WORCESTER MIXED. Our own mixture of single and double annual varieties; all types and colors. Pkt. 5 cts., 1/4 oz. 15 cts., oz. 50 cts.

HARDY PERENNIAL POPPIES

ICELAND POPPIES. Though hardy perennials, generally treated as annuals blooming the first year, if seed is sown early. Of graceful habit, with fern-like foliage. They bloom profusely, and, if no seed-pods are allowed to form, until October.

890 **WHITE AND SHADES OF YELLOW AND ORANGE, MIXED.** Pkt. 5 cts., 1/4 oz. 20 cts.

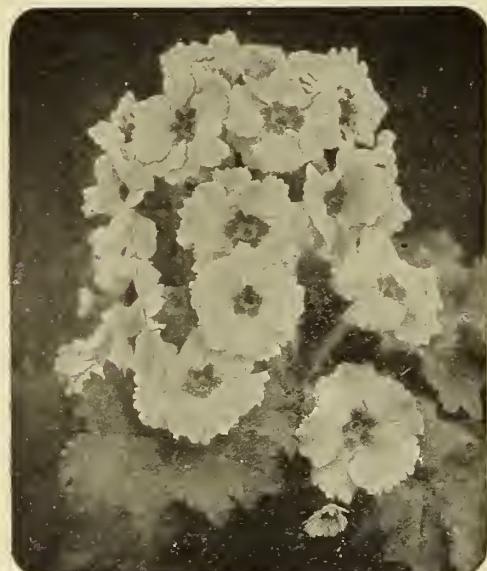
ORIENTAL POPPIES. Extremely desirable for the hardy perennial border; gorgeous blooms. Easily grown from seed sown either in late fall, or early spring. They bloom the second spring from sowing, and, though their season is short — about three weeks in June they make a very effective display.

892 **ORIENTALE.** Deep crimson flowers, with blotch of black on each petal. Pkt. 10 cts., 1/4 oz. 25 cts.

893 **NEW ORIENTALE HYBRIDS.** Flowers of enormous size, sometimes 6 inches or more in diameter and of many novel colors. Pkt. 10 cts.



SHIRLEY POPPY



PRIMULA SINENSIS

HARDY PRIMROSES

Although known as hardy perennials, these require in this climate some protection. They may be placed in a cold-frame, or if protected with leaves, covered by a box, they will live through our severest winters. They are among the best of the early-blooming plants.

ELATIOR (*Polyanthus*). Excellent for either pot or outdoor culture. Colors mostly shades of yellow, and red and yellow.

903 CHOICEST MIXED. Pkt. 10 cts

904 VULGARIS. True yellow English Primrose; canary yellow; fragrant. Pkt. 10 cts.

PORTULACA

Well-known tender annuals, blooming profusely all summer. Thrive in most soils and locations, but succeed best in a light, sandy soil and sunny spot, enduring any amount of dry weather. Form a dazzling display when sown in masses.

894 **DOUBLE CHOICE MIXED.** Usually from fifty to sixty per cent of the flowers will come double. Pkt. 10 cts., 1/8 oz. 40 cts., 1/4 oz. 65 cts.

895 **SINGLE SCARLET.** 896 Rose. 897 White. 898 Yellow. Pkt. 5 cts., 1/4 oz. 20 cts., 1/2 oz. 35 cts.

899 **SINGLE MIXED.** Pkt. 5 cts., 1/2 oz. 25 cts., oz. 40 cts.

PRIMULA

(Primrose)

PRIMULA SINENSIS (Chinese Primrose). A beautiful winter-blooming greenhouse perennial and one of the most pleasing for the home, blooming from December to spring. While its culture is not easy, it is by no means impossible for the amateur to raise fine, thrifty plants from seed. For early winter blooming seed should be sown the first week in April. Two sowings are advisable, but the second should not be later than the middle of May. Sow in well-drained shallow pans or boxes, using finely sifted loam, leaf mold and sand in equal parts. Cover lightly and water carefully, but well. Keep moist and in shade, and in a temperature of about 60 degrees. In summer keep in a cool, shady location, in winter in a north window in a temperature of 45 degrees.

900 **CHOICEST MIXED.** Comprises the finest fringed varieties. Pkt. 35 cts.

PRIMULA OBCONICA. Easily grown. Seed sown in May will produce blooming plants by early fall. A beautiful pot plant and does well in the open ground in a cool, shady location if soil is strong, moist and rich. The treatment is about the same as of the Chinese Primrose except that the seeds should be sown in good porous soil, as they do not germinate well in leaf mold. The soil for final potting should be heavy and the plants should be kept in temperature of from 50 to 60 degrees.

901 **GRANDIFLORA.** Blooms profusely; white, shading to lilac. Pkt. 10 cts.

902 **PRIMULA STELLATA.** Star like flowers, borne in clusters, producing a large variety of colors; plants are very graceful and fine for winter flowering. Pkt. 35 cts.

PYRETHRUM

Well-known, hardy herbaceous perennials of easy culture.

910 **AUREUM.** (Golden Feather). Golden foliage; small, white flowers. Cultivated for its foliage alone and usually treated as an annual. 1 foot. Pkt. 5 cts.

913 **ROSEUM HYBRIDUM.** Blooms freely from June to September, bearing large-flowering, daisy-like flowers ranging from light pink to deep red, with bright yellow center; excellent for cutting. Pkt. 10 cts.

ROSE CHAMPION. See *Agrostemma Coronaria*.

ROSE OF HEAVEN. See *Agrostemma Coeli*.

RICINUS. See *Castor Bean*.

RESEDA. See *Mignonette*.

RHODANTHE

One of the finest everlasting flowers and an excellent plant for garden decoration. If flowers are gathered before they are fully expanded and dried in the shade, they will retain their color for years. Tender annual. 1 foot.
920 MIXED COLORS All shades of pink, rose, crimson and white. Pkt. 5 cts.

**ROCKET (Sweet)
(HESPERIS MATRONALIS)**

Hardy perennial plant of easy culture, bearing clusters of purple or white fragrant flowers. 1½ feet.
921 Mixed. Pkt. 5 cts.

RUDBECKIA (Cone flower)

To this family belong the favorite plant, Golden Glow, and the well-known wild flower, Black-eyed Susan, or Yellow Ox-Eye Daisy. Both the annual and the perennials are of the easiest culture and grow in nearly all soils and situations, thriving alike in partial shade or fully exposed to the sun.

923 BICOLOR SUPERBA. Free-blooming annual of dense, bushy growth, bearing on long stems, large, bright yellow flowers with velvety brown spots at base of petals, and disc or cone of brown. Excellent for cutting. 2 feet.
 Pkt. 5 cts.

925 NEUMANNI. Large, golden yellow flowers, with maroon cone. Very showy; blooms for a long time. One of the best hardy perennials. 2 feet. Pkt. 15 cts.

926 PURPUREA (Echinacea; Giant Purple Cone-Flower). Large flowers, about 4 inches in diameter, reddish purple, with large cone of brown. Hardy perennial. 3 feet. Pkt. 15 cts.



Lower Flower 1-2 Actual Size.
SALPIGLOSSIS

SALPIGLOSSIS (Velvet Flower; Painted Tongue)

Graceful, half-hardy annual, bearing from August to October, richly colored, funnel-shaped flowers, ranging from deepest purple to almost black and blue, through various shades of red, brown and yellow, to creamy white, usually marbled or veined with several contrasting colors. These are borne on long, slender stems, and are excellent for cutting, keeping well in water. Seed may be sown in the house the last of March or in the open ground in May. The plant succeeds best in deep, rich, rather light loam of medium moisture. 2 feet.

928 GRANDIFLORA. Choicest mixed. Extra-large-flowered strain. Pkt. 5 cts., ¼ oz. 20 cts.

929 EMPEROR. Mixed colors. New type, with one thick leading stem; flowers large and distinct in their beautiful veining of gold. Pkt. 10 cts., ¼ oz. 20 cts.

930 Collection of six colors separate. 50 cts.

SAEVIA (Scarlet Sage)

A mass of bloom from late summer until killed by frost; tender perennials, treated as an annual. Seed should be sown early indoors, or in hot bed and the plants set out when the weather has become warm.

935 SPLENDENS GRANDIFLORA. The well-known Scarlet Sage. 3 feet. Pkt. 10 cts., ¼ oz. 40 cts., oz. \$1.50.

936 BONFIRE (Clara Bedman). Compact, bushy growth, blooms earlier and more profusely. Intense scarlet. 2 feet. Pkt. 10 cts., ¼ oz. 40 cts., oz. \$3.

937 PATENS. Rich, intense blue. 2 feet. Pkt. 25 cts.

SCABIOSA (Mourning Bride)

The flowers are large and double with a great variety of colors. Of easy culture and blooms freely from July until hard frost. Hardy annual. 2½ feet.

945 LARGE-FLOWERED. Mixed Colors. Fine, large, double flowers in a wide range of colors. Pkt. 5 cts., ¼ oz. 15 cts.

946 Collection of six colors separate. 25 cts.

SCARLET RUNNER. See Beans — Ornamental varieties, page 52.

SCHIZANTHUS (Butterfly, or Fringe Flower)

Beautiful, dainty, half-hardy annual. Seed may be sown in the open ground, or in the house, and the plants set in the garden in May. Should be planted in a sheltered place or the plants tied to stakes as the stems are very brittle and easily broken by strong winds. An excellent house-plant. 1 to 1½ feet.

948 GRANDIFLORUS HYBRIDUS. Very fine new varieties. Pkt. 10 cts.

949 WISETONENSI. Containing the most beautiful shades of white, pink, rose and crimson. Excellent for pot culture. Pkt. 25 cts.

SENSITIVE PLANT (Mimosa Pudica)

950 PUDICA. Globular heads of small pink flowers. Grown chiefly for the peculiar habit of the plant, the leaves closing and dropping at the slightest touch. Tender annual. 1½ feet. Pkt. 5 cts.



STOCK

SHAMROCK

950A True, small-leaved variety. Imported seed. Pkt. 10 cts., ¼ oz. 40 cts

SILENE (Catchfly)

Profuse-flowering plants of easy culture. Seed of the annual sorts may be sown in the open ground early in the spring or in the fall if early bloom is desired.

951 ARMERIA, Mixed (Common Catchfly). Annual; blooms from July to September. White, pink, and red. 1½ feet. Pkt. 5 cts.

953 PENDULA COMPACTA, Single and Double. Mixed Colors. White, rose and red. Annual. Largely used for edgings. May to August. 6 inches. Pkt. 5 cts.

SNAPDRAGON. See Antirrhinum.

STOCK (Gilliflower)

One of the most popular annuals, remarkable for its profusion of bloom, brilliancy and diversity of colors, and lasting quality of its flowers. Plants from seed sown inside in March or April commence to bloom in July and those from seed sown in the open ground in about ten weeks, and continue until frost. Plants grown in rich soil and well cared for, produce 80 to 90 per cent of double flowers.

DRESDEN PERPETUAL, or BRANCHING (Cut-and-Come-Again). A perpetual blooming class of branching habit; double, fragrant flowers. 2 feet.

960 APPLE-BLOSSOM. Pink. 961 Dark Blood-Red. 962 Canary-Yellow. 963 Crimson. 964 Light Blue. 965 Violet. 966 Snow-White. (Princess Alice).

Each of above, pkt. 10 cts., one pkt. each of the seven colors, 50 cts. (no other discount to apply); ¼ oz. 60 cts., ¼ oz. \$1.

967 CHOICEST MIXED. Pkt. 10 cts., ¼ oz. 50 cts., ¼ oz. 90 cts.

LARGE-FLOWERED DOUBLE TEN WEEKS. A very choice strain, producing a very large per cent of double flowers. Fine for bedding. ½ to 2 feet.

970 CHOICEST MIXED. Pkt. 10 cts., ¼ oz. 50 cts., ¼ oz. 90 cts.

971 DOUBLE GERMAN TEN WEEKS, Mixed Colors. Seeds grown in the open ground instead of in pots, therefore cheaper. A good range of colors. 1½ feet. Pkt. 5 cts., ¼ oz. 25 cts., ¼ oz. 40 cts.

STOKESIA CYANEA (Cornflower Aster)

973 A beautiful, hardy perennial, growing about 2 feet high and bearing from August to hard frost beautiful centaurea-like lavender-blue flowers, among the best for cutting. Pkt. 10 cts.

SUNFLOWER HELIANTHUS

The Sunflower grows well in all soils if fully exposed to the sun. The taller varieties make excellent back-ground to other plants. All the varieties listed are annuals.

975 **CUCUMERIFOLIUS.** (Miniature Sunflower). Small, single flower, rich yellow, 4 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

980 **NEW MINIATURE VARIETIES.** Many new varieties of the miniature type, of various shades of yellow and creamy white. Some are large, some have twisted petals and some black centers. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

981 **PERKEO.** A distinct dwarf variety of the Miniature and growing only a foot high and blooming from the last of June until hard frost; is especially valuable for bedding. Pkt. 10 cts.

983 **DOUBLE MINIATURE.** Mixed. While the single flowers are more graceful, the double last longer when cut. Flowers small, double or semi-double and borne on long stems. Of various shades of yellow. 4 feet. Pkt. 10 cts.

984 **DOUBLE CHRYSANTHEMUM-FLOWERED.** Flowers larger than the preceding; full and double. Orange yellow. 5 feet. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts.

986 **RUSSIAN MAMMOTH.** Very large. 7 to 9 feet. Pkt. 5 cts., oz. 10 cts.

SWEET SULTAN. See Centaurea.

SWEET WILLIAM (*Dianthus barbatus*)

A splendid hardy biennial with large trusses of sweet scented flowers produced in abundance. Seed should be sown at any time from early spring to the last of August, the late sown generally making as good plants as the early, and blooming to the full extent the following summer. 1½ feet.

1300 **SINGLE MIXED COLORS.** Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., $\frac{1}{2}$ oz. 20 cts., oz. 30 cts.

1302 **HOLBORN GLORY.** A new strain of the auricular-eyed section; both the head and individual flowers are of the largest size and each of the latter shows a clear white eye; of an exceedingly wide range of colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts.

1308 **DOUBLE, LARGEST-FLOWERED.** Choicest mixed. A greatly improved strain. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

1310 **LATIFOLIUS ATROCOCINEUS** (New Annual Everblooming). This new type is the result of a cross of the common annual pink and the Sweet William. It combines the free and continuous blooming habit of the former with the hardness of the latter, and though a biennial blooms freely from seed the first season. Color an intense scarlet. Pkt. 10 cts.

1311 **LATIFOLIUS DOUBLE** (Annual Everblooming). Mixed Colors. In addition to the scarlet, this contains purple, rose, and violet. Pkt. 10 cts.

THUNBERGIA

1315 An annual vine, growing about 4 feet high, bearing medium-sized flowers white, buff or orange, with dark eye. Largely used in hanging baskets or window boxes. Pkt. 5 cts.

VERBENA

Favorite annuals, thriving in nearly all soils. Useful for beds, borders, carpeting ground, and vases. Plants from seed sown in open ground in May will begin to bloom in August, and those sown inside in March will bloom from June until frost.

1320 **MIXED COLORS.** A good strain, all colors of old type. Pkt. 5 cts., $\frac{1}{4}$ oz. 25 cts.

1321 **MAMMOTH MIXED COLORS.** Comprises the best large-flowering sorts of many colors. Pkt. 10 cts., $\frac{1}{4}$ oz. 40 cts.

1322 **SCARLET DEFIANCE.** Large trusses of deep rich scarlet. Pkt. 10 cts.

1323 **MAMMOTH WHITE.** Truss and florets large; fragrant. Pkt. 10 cts.

1324 **ITALIAN STRIPED.** Large trusses and medium-sized flowers; each distinctly striped. Pkt. 10 cts.

1325 **VERBENA, "BURBANK'S GIANT MAYFLOWER"** A selected strain from Luther Burbank, having a powerful fragrance like that of the Trailing Arbutus. The flowers are of the largest size and most beautiful colors. Pkt. 15 cts., 2 pkts. 25 cts.

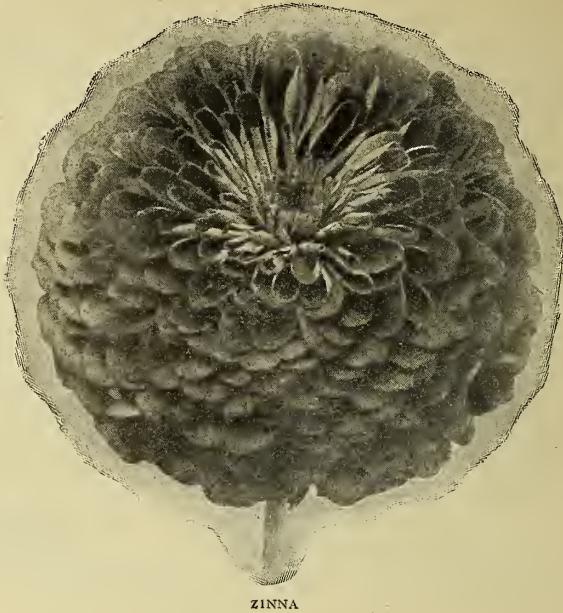
VIOLA CORNUTA. TUFTED PANSIES

Flowers are not so large as the Pansy proper, but is very desirable as it blooms profusely, and is more quickly and easily grown. Seed sown in April will produce blooming plants in June that will be covered with flowers for a long time, and, if planted in cool, moist soil, partly shaded, nearly all summer.

1335 **MIXED TUFTED PANSIES.** Finest mixture of all colors. Pkt. 10 cts., $\frac{1}{8}$ oz. 30 cts., $\frac{1}{4}$ oz. 50 cts.

WALLFLOWER

Half-hardy perennial. A universal favorite in England. Though a fine bedding plant, is not well-known in America. It is more often grown as a pot plant and for this purpose is well adapted. The flowers are very fragrant and usually of various shades of yellow, brown and reddish brown. Seed may be sown in the open ground in the spring when warm, and, if given about 12 inch of room, will make strong, stocky plants for winter bloom.



ZINNA

1340 **SINGLE.** Mixed Colors. Pkt. 5 cts.

1341 **DOUBLE BRANCHING.** Mixed Colors. Pkt. 10 cts.

1342 **PARIS EXTRA-EARLY.** A new single-flowered strain, blooming throughout the season, from spring-sown seed. Colors light brown, brownish red, yellow and creamy white. Mixed. Pkt. 10 cts., $\frac{1}{4}$ oz. 20 cts.

WILD CUCUMBER. See Cucumber Vine.

ZINNIA. YOUTH AND OLD AGE

Old-time favorite annuals; easily grown from seed and transplanted readily. Showy flowers in profusion all summer. Fine for bedding, borders or among shrubbery.

1350 **MIXED COLORS.** An improved strain, comprising all colors and many large flowers. 2 feet. Pkt. 5 cts., $\frac{1}{4}$ oz. 15 cts., oz. 50 cts.

1351 **Crimson.** 1352 **White.** 1353 **Scarlet.** 1354 **Yellow.** Each, pkt. 5 cts., $\frac{1}{4}$ oz. 20 cts.

1357 **Collection of Twelve Colors.** Pkt. 50 cts.

1358 **MAMMOTH, or GIANT-FLOWERED, Mixed Colors.** Flowers of the largest size and of various colors. 2½ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts., oz. 75 cts.

1360 **CURLED AND CRESTED.** A pleasing variation from the regular type, the petals being twisted, curled and crested. All colors. 2½ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

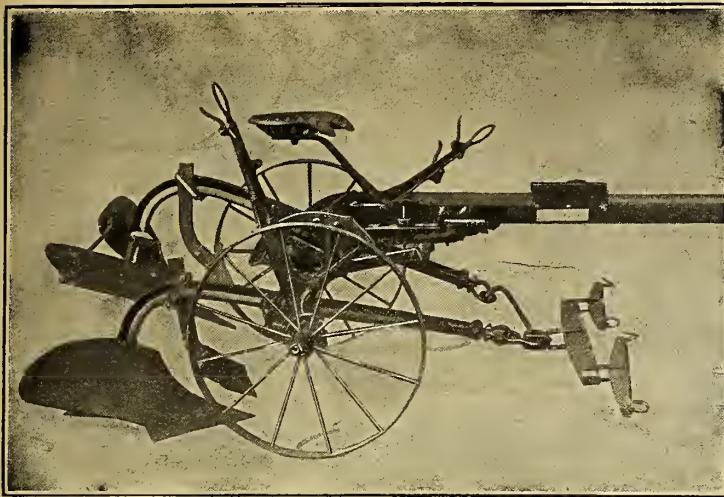
1362 **ZEBRA.** Striped flowers, the colors varying on each plant. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

1363 **LILLIPUT (Pompon).** Small, double flowers of many colors. Very profuse. 1½ feet. Pkt. 10 cts., $\frac{1}{4}$ oz. 25 cts.

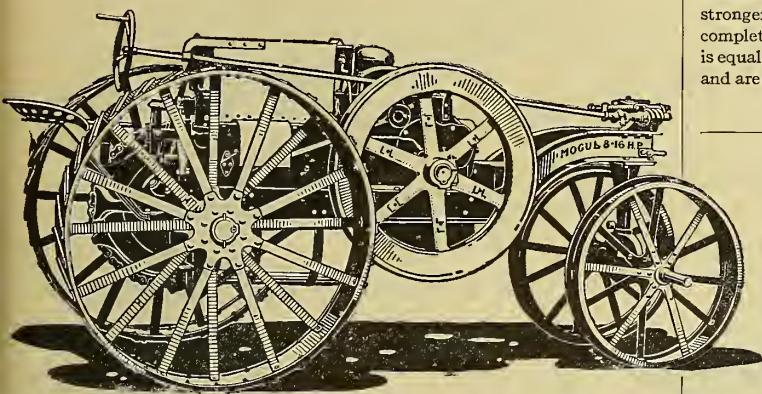
1364 **HAAGEANNA fl. pl.** (Mexican Zinnia). A distinct type with small pretty, double and semi-double flowers, which would hardly be recognized as Zinnias by those unfamiliar with the type. Of dwarf and slender growth the plant is excellent for bedding, while the deep orange flowers are good for cutting. Pkt. 10 cts.

WILD FLOWER GARDEN MIXTURE

1368. A mixture of many free-blooming annuals, which, once sown, require little care, and sown in this way, almost none. In fact, with the exceptions of thinning out some plants where they grow too thickly and removing an occasional weed, the bed often looks better let alone, is more in keeping with its name, and more like some lovely spots where wild plants grow. The possibilities of this mixture are great, the different seasons of blooming insuring constant succession of flowers from early in the season until hard frost, and in the height of bloom, some new flower nearly every day. It affords a very easy and cheap way to quickly fill large areas or any unsightly place, and the results will surprise those who never saw a wild-flower garden; not only will the bed be attractive, but also will furnish many good flowers for cutting. To insure the greatest possible variety, the bed should be quite large. Pkt. 5 cts., $\frac{1}{2}$ oz. 15 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.



WORCESTER SULKY PLOW

I. H. C. 8-16 Mogul Tractor (2)

The MOGUL, small farm, oil Tractor for \$675 F.O.B. Chicago cuts in half the cost of work, cost of help, time of operating and labor of farming. The most power for the weight and money ever offered. A small, stocky, powerful steel machine with a grip on the earth of eight mechanical horse power and a pull on the belt of 16 horse power. Can be used as a tractor or as an engine for running ensilage cutters, pump, wood saw or any other purpose, and uses kerosene or cheap distillate oil for fuel.

This machine is made and adapted for our New England farms and is gaining in popular favor very rapidly. Price \$6 75. F.O.B. Chicago.

John Deere Two-Way Sulky Plow (4)

The frame of this plow is wrought steel amply strong and rigid to stand any reasonable strain. The axles, bails, levers, and wheels are all steel and all the castings are malleable iron. In point of construction this plow is probably the strongest one on the market. It is similar to the Worcester and Syracuse as each plow is entirely independent of the other having its own operating lever for adjusting the depth. The plows are raised entirely by the team, the foot levers are directly back of the foot rests and require but the slightest pressure to raise the plow. The efficiency of this plow is greatly increased by means of the pole shift. By its use all side strain on the team is avoided and the operator is enabled to regulate the width of the furrow and you can plow around curves and still get a full width furrow. Pressure on the right or left foot lever according to the need, swings the frame and correspondingly the working plow to just the degree required. The wheels have oil tight, dust-proof, long distance wheel boxes.

This plow is remarkably easy to operate. Any boy who can drive a team can work it. The wheeling base is 45½ inches which makes it nearly impossible to tip over. Price \$50.00, \$1.00 discount for cash.

Farm Implements

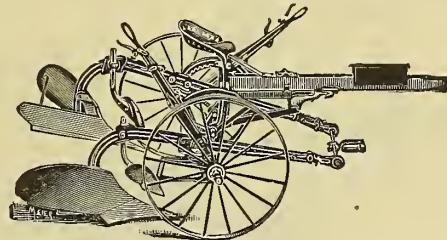
It pays to use a Sulky Plow. They do better work than any hand-held plow and it is easier for both man and team.

The Worcester Reversible Double Sulky Plow (1)

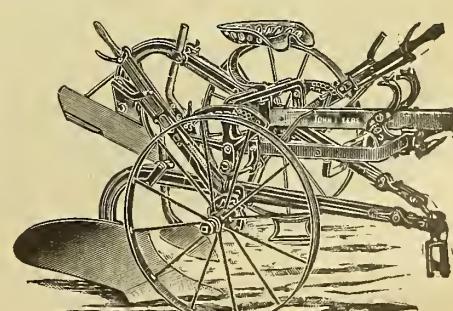
While it may seem that you pay more money for a Sulky than for any other plow you really do not, for you must consider in buying a Sulky you get two plows instead of one and you also get a Sulky attachment and a plow that gives the quality you get in a Sulky is worth \$15 each and the attachment is well worth \$20.

This plow works on side hill and level land; it is fitted with steel plows mounted on wheels and is easily controlled by the driver. The team raises the plow at the end while the driver has his hands free to drive the team. The width of the furrow can be controlled by the feet. The plows are made of the best steel and the jointer standards are flat steel which makes them much stronger than those used on any other style of plow. We furnish this plow complete with an extra set of points, whiffletree, evener and yoke. This plow is equal to any similar make on the market but we buy them in large quantities and are able to make a much lower price than we can on other standard makes.

Price, \$42.00. \$1.00 discount for cash.

**Syracuse Reversible Sulky Plow (3)**

Will plow on side hill or level ground and leaves no dead furrows. Throwing the plow in and out of the ground is done by the team, while the operator has control of the width of the furrow with his feet, leaving both hands free to handle the team. Two plows are used, one at a time, to turn a furrow each way. Will do satisfactory work in all kinds of soil, and of plowing, hill or level. Weight of plow, complete, 556 lbs. We furnish two sets of points and two-horse hitch with each plow. Price, \$46. Three-horse hitch in place of two-horse, \$2 extra. \$1.00 discount for cash.



THE WACHUSETT SWIVEL PLOW (5)

This is our latest and we, believe for all kinds of work, the best Swivel Plow on the market. Nearly all other plows on the market at the present time have some defects, and we have been studying for the past few years to overcome them as far as possible, and we think we have accomplished our object in this plow. We are now equipping these plows with a shifting coulter.

We can furnish either hardened or steel moldboards.

List price No. 2, \$11.00
List price No. 12, 12.50

List price, No. 3, \$11.00.
List price, No. 13, 12.50.

No. 2 and 3 Hardened, No. 12 and 13 Steel Moldboards.

Discount for cash, \$1.00.

**DIAMOND A, B, AND C PLOWS (6)**

New Style with Steel or Chilled Moldboard

Excepting the Wachusett this is one of our best swivel plows. It is furnished with steel or chilled moldboard, patent foot latch, wheel and cutter and shifting clevis. All parts interchange with the '76 plow made at Castleton, Vt.

A cuts 5 to 7 in., 11 to 14 in. wide; wt., 119 lbs. List price, \$13.00.
B cuts 4 to 6 in., 8 to 12 in. wide; wt., 114 lbs. List price, 12.00.
C cuts 3 to 5 in., 7 to 8 in. wide; wt., 71 lbs. List price, 8.50.

A and B are two-horse; C one-horse. A and B have wheel and cutter. C has wheel. Discount for cash on A and B, \$2.00; C, \$1.00. Steel Moldboard, \$1.50 extra.

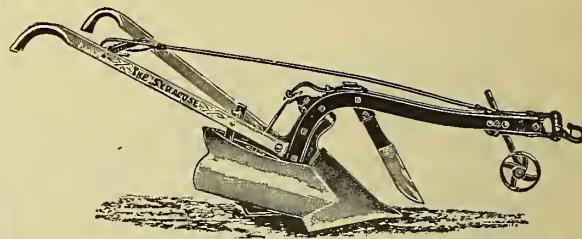
**THE ARLINGTON SWIVEL PLOW (8)**

The Arlington Plow has become a favorite in many sections. They are made with steel shifting lever, clevis, patent spring foot latch. Moldboards are made of patent steelized metal, and all castings nicely polished. The beam and handles are made from selected stock, neatly striped and varnished.

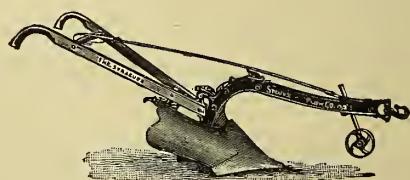
No. 30 turns a furrow 13 to 16 in. wide, 6 to 8 in. deep. Weight, 135 lbs.
No. 29 turns a furrow 12 to 14 in. wide, 5 to 7 in. deep. Weight, 123 lbs.
No. 27 turns a furrow 8 to 11 in. wide, 4 to 6 in. deep. Weight, 85 lbs.

No.	With Wheel	Wheel and Cutter	Wheel and Jointer
30	\$13.50	\$15.00	\$15.00
29	12.50	14.00	14.50
27	9.00	10.00	

Discount for cash, \$2.00 on Nos. 30 and 29; \$1.00 on No. 27.

**SYRACUSE NO. 822 2-HORSE SWIVEL PLOW (9)**

Particular attention has been given to this plow for its ample throat capacity and close fitting joints to prevent clogging. The plow is built entirely of steel or malleable iron. It is furnished with wheel and automatic shifting jointer or coulter and shifting clevis. This plow will turn a furrow 4 to 7 inches deep and 4 to 10 inches wide, weight 140 lbs. List price with steel moldboard, \$18.00. Discount for cash, \$2.00. With cast moldboard, \$16.00. Discount for cash, \$2.00.

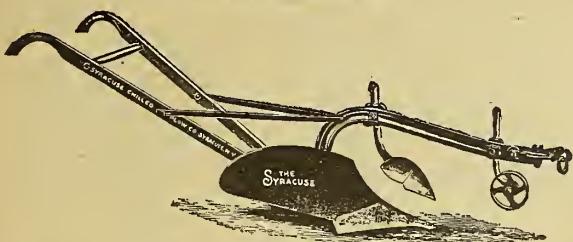
**SYRACUSE NO. 823 ONE HORSE PLOW (10)**

This plow is similar in construction to the No. 822, only being somewhat lighter. It is just the right size for a large one-horse in plowing gardens. It is made of steel and malleable iron same as the No. 822, only lighter. Ample room is provided under the beam to prevent clogging. This plow is furnished with wheel only.

List price, \$12.50. Discount for cash, \$1.50.

Syracuse No. 32 (11)

Two-Horse Landslide Plow



This plow has steel moldboard and wheel, straight cutter or jointer. No. 32 is the same plow used on the double sulky with the addition of a pair of handles, and no better plow was ever made.

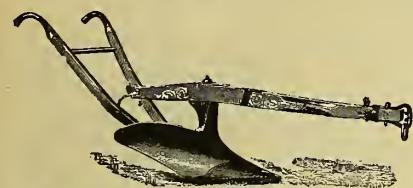
No. 32 cuts 5 to 7½ in. deep, 10 to 13 in. wide; weight, 103 lbs.

List Price, \$16.50. Discount for cash \$2.00.

**Syracuse No. 5
Vineyard Plow
One-horse (12)**

This plow is designed for plowing between rows of trees or vines. The handles are adjustable sideways or up and down. The horse can walk in the furrow or on the land. It can also be used for garden plowing. Iron beam; cuts 3 to 5 in. deep, 7 to 10 in. wide, weight, 63 lbs.

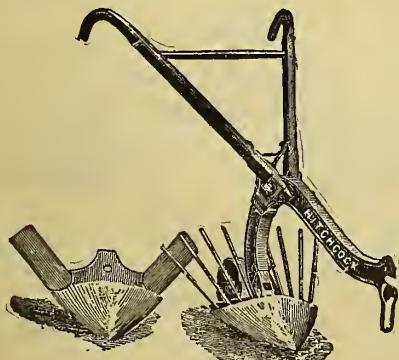
List Price, with wheel, \$7.75. Discount for cash, 50 cts.

**Doe
Cast Iron
Plow (13)**

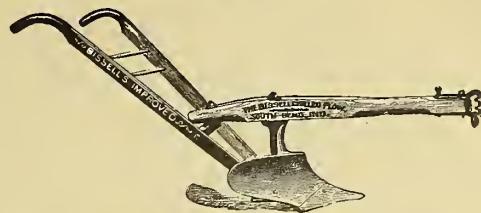
A good general purpose plow, designed for all kinds of garden work. Wood beam, cast moldboard and point.

	Plain	Wheel and Cutter.
E 0 Medium one-horse,	\$ 5.00	
E 1 Large one-horse,	6.00	
E 2 Light two-horse,	7.00	
E 3 Medium two-horse,	8.00	\$10.75
E 4 Two or three-horse,	10.00	12.75

Discount for cash, 50 cts.

**The Hitchcock Potato Digger and Shovel
Plow Combined (14)**

For digging and hillling potatoes.
Price complete \$10.50. Without hilller, \$8.00.
Discount for cash 5%.

**Oliver Pattern Chilled Plow (15)**

All parts interchange with the Oliver. This plow has a chilled moldboard; extra high standard, which prevents clogging in weeds or trash. It is our best one-horse landside plow.

Number.	Description.	List Price.
No. A.	Light one-horse.....	\$4.50
No. B.	Medium one-horse.....	6.00
No. 10.	Large one-horse.....	7.00

Discount for cash, 50 cts.

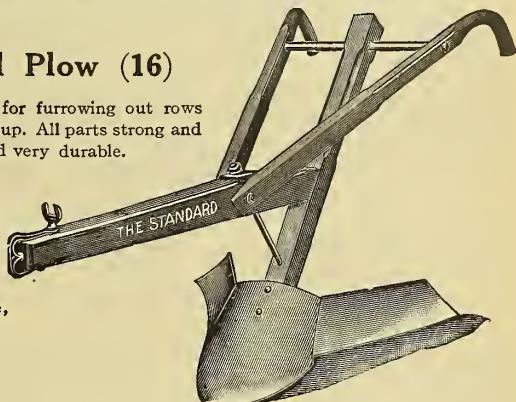
The above prices are without wheel.

Shovel Plow (16)

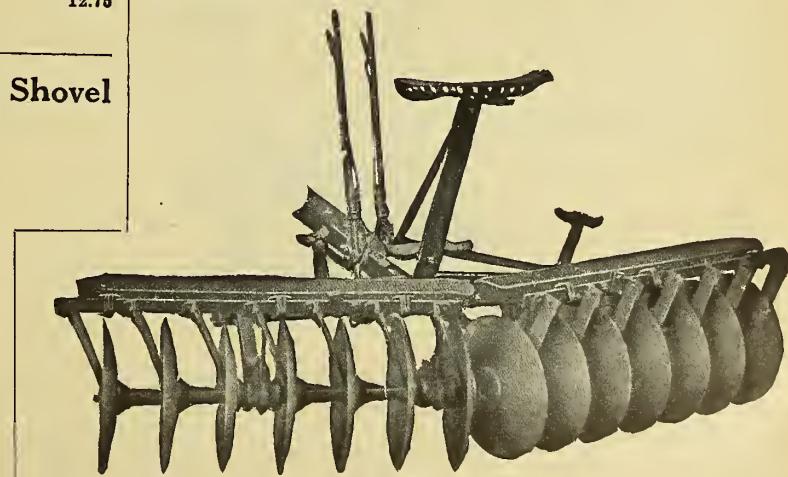
Very handy for furrowing out rows and for hillling up. All parts strong and well braced and very durable.

List Price,
\$3.50.

Net cash price,
\$3.25.

**Reliance Disc Harrow, with steel weight boxes (16A)**

This Harrow has 12-16 in. steel discs, either round or cutaway. This Harrow is made especially for us and is designed for farmers who want a Harrow with weight boxes, so that it can be weighted to work on very hard soil. These weight boxes are also handy to throw in loose stones while going over the field. This Harrow is furnished with steel scrapers, whiffle trees, evener and neck yoke, and has two shifting levers and is made entirely of steel and cast iron with exception of the pole. It is painted bright red and is a first class Harrow in every way.



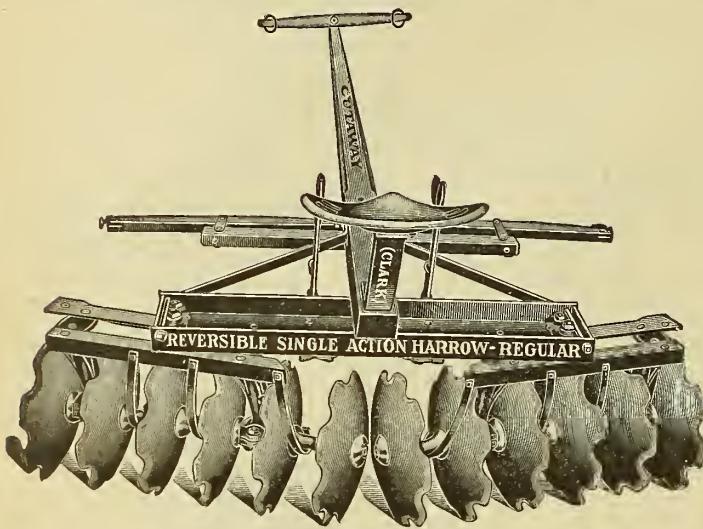
Prices.

12-16" discs.....	\$24.00
12-18" round discs.....	26.00
1-220" round discs.....	27.50

5% off for cash with order.

The Clark Family Cutaway Disc Harrows

These are the original Clark Cutaway Harrows. They are famous the country over. All Discs used on the Harrow have forged edges. Forging compacts the molecules in the steel, making the discs much tougher than those sharpened in any other way and makes them retain a sharp edge much longer. A size for every farm, whether you use one small horse or a tractor for power.



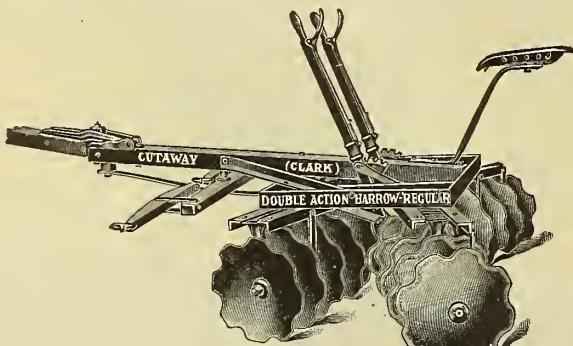
REVERSIBLE SINGLE ACTION HARROW (17)

All Cutaway Single Action Harrows are reversible. If you will observe the illustration you will see that the "dish" of the discs is out, and consequently the soil is moved outwardly. To reverse this harrow, you simply disconnect the lever links from the gang frames and swing the gangs around on the king bolts until what were formerly the outer discs become the inner discs, and reconnect the links. In this latter position the discs will throw the soil inwardly.

Like those on all other Cutaway implements, the discs on this harrow are the famous Clark cutlery steel discs, forged sharp. This feature partly accounts for the remarkably long service always given by Cutaway disc implements.

No. of Machine	No. of Discs	Diam. of Discs	Width of Cut	Hitch	Shipping Wt.	Cost
A-6	12	16	6 ft.	2-H	290	\$27.75

Discount 20 per cent for cash.

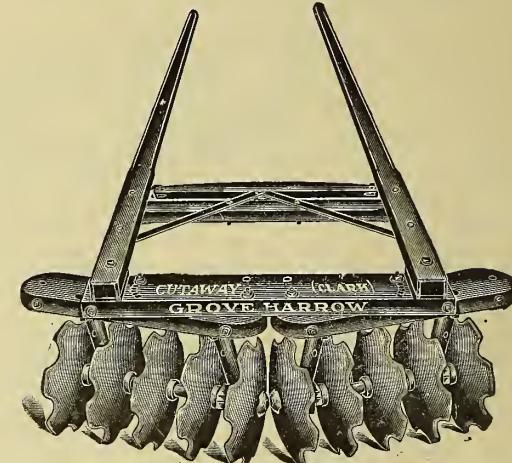


CLARK'S DOUBLE-ACTING CUTAWAY HARROW (18)

This harrow has two pair of gangs, one throwing in and the other out, which thoroughly pulverizes and levels the ground at the same time. This is a very strong made harrow and can be used for either two, three or four horses.

Price A 5 Double Acting 20-16 in. discs, 5 1/4 ft. cut, 2 horse hitch.....	\$41.25
X 4 " " 16-18 " " 4 1/2 " " 2 " "	41.50
A 4 " " 16-16 " " 4 1/2 " " 2 " "	37.00

Discount for cash 20 %.

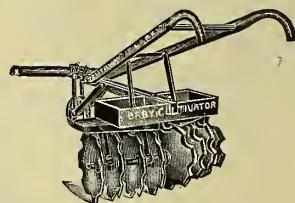


CLARK'S ONE-HORSE CUTAWAY HARROW (19)

This harrow is especially adapted to the needs of small farmers and fruit growers. It has ten 14 inch cut-out steel discs and is the only one-horse Disc Harrow that we have ever seen that we could recommend. A six Disc Harrow is not practical on account of the width. This Harrow cuts 4 feet and overcomes that difficulty. We can recommend this Harrow as being far superior to any spring tooth for general farm work. With Seat.

No. of Machine	No. of Discs	Diam. of Discs	Width of Cut	Hitch	Shipping Wt.
*O-5	10	14 "	4'	1-H	150

Price, \$19.75. 20% off for cash.

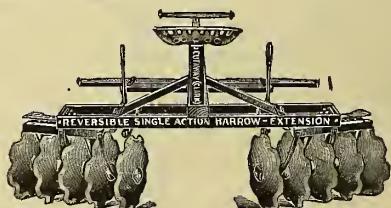


CLARK BABY CULTIVATORS

These cultivators are made of the same high grade of steel as the harrow and are very efficient in pulverizing the soil between rows of garden truck or berry bushes.

No. 1 6-14 inch disc. 24 in. cut	\$13.00
No. 2 8-14 " " 32 "	\$15.00
No. 3 10-14 " " 40 "	\$16.50

20% off for cash.

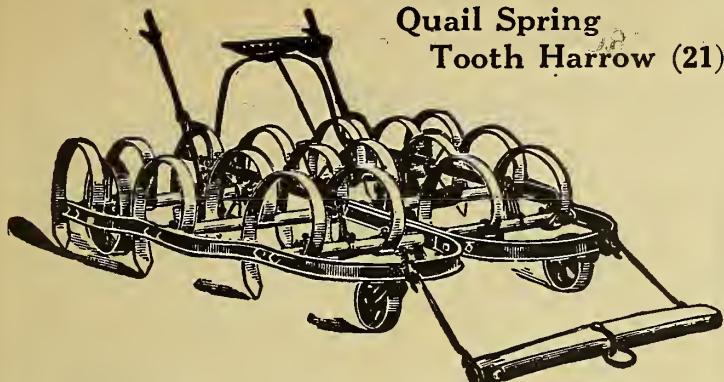


CLARK'S REVERSIBLE SINGLE ACTION EXTENSION HEAD HARROWS

These harrows are made for use in orchards and permit cultivation close to the trees without driving the team under the branches. The double action harrows are equipped with double, triple and gradepull extensions. No orchard is complete without one of these harrows.

6 12-16 inch disc, 8 ft. cut, 2 ft. Hitch	\$29.25
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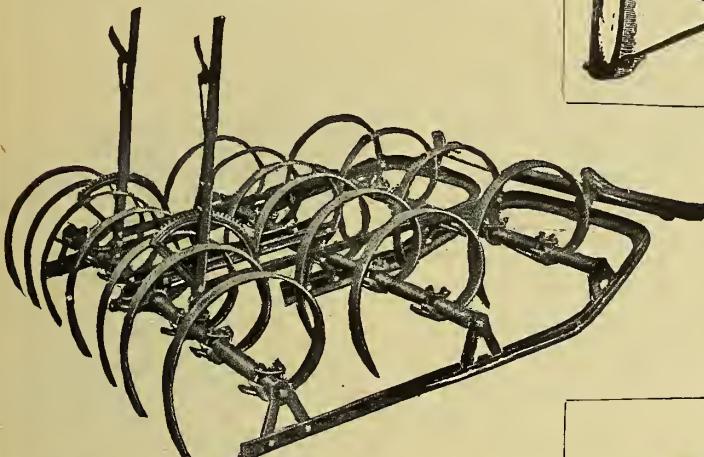
20% off for cash.



**Quail Spring
Tooth Harrow (21)**

Our best spring harrow. It is made of the very best material throughout and has two levers for raising and lowering the teeth, has wheels for traveling with the teeth up, and has non-clog frame at center, in front. Bars on which teeth are hung fasten at ends so they cannot spring out of place. Price, 15-teeth, \$17. With seat \$1.50 extra. Price 17 teeth \$18.50. Discount for cash, \$1.00

**The Monarch Spring Tooth Lever
Harrow (22)**

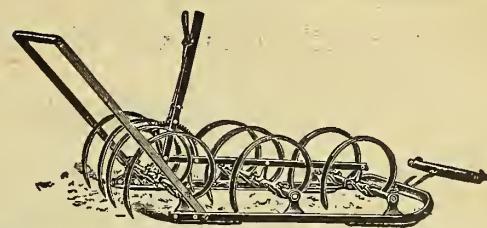


Some users prefer a spring harrow with shoes to slide on, in place of wheels, claiming that for certain purposes and in mellow soil, the depths can be regulated better. While this has to be hauled to and from the fields on the shoes instead of wheels, it will do just as good work, and is as durable as any harrow on our list. Price, 15-teeth, \$15.50; 17 teeth, \$16.50. Discount for cash, \$1.00.

Dunham All-Steel One-Horse Land Roller (25)

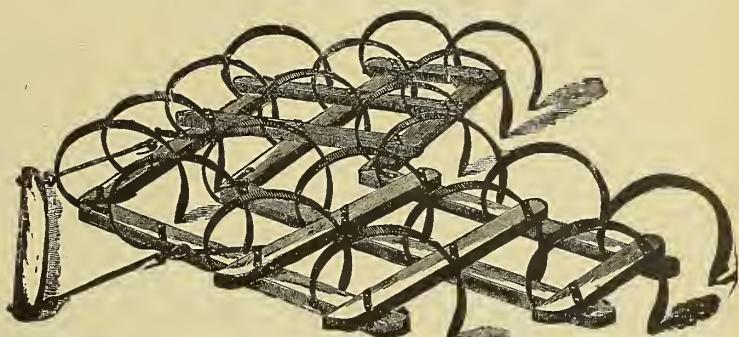
6 ft. 24 in., three sections.

Same construction and quality as the two-horse roller, and the best for truck farms. This roller has solid steel heads same as the two-horse. Price, \$24. 5% off for cash.



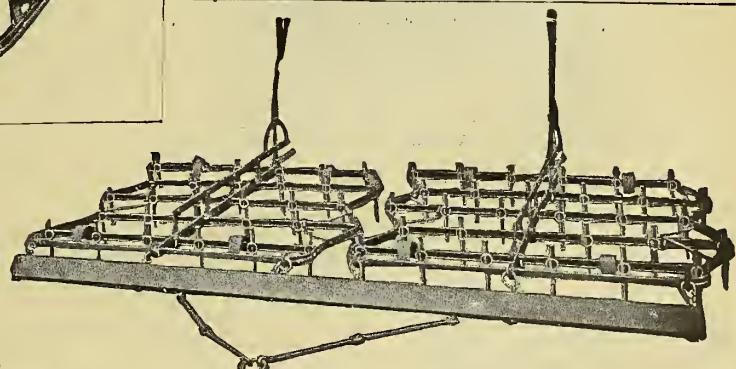
**Monarch One-Horse Spring Tooth
Harrow (23)**

This is the best one-horse harrow made. It has standard teeth, strong tooth-holders and a convenient handle for working around the ends. Price, \$10. Discount for cash, \$1.00.



**The Original Perry Spring Harrow
(24)**

This is the first spring-tooth harrow ever offered for sale, and it has many friends. For durability it is equal to any harrow made. The wood frame is lined with carbon steel. Bolt heads are protected. The teeth cannot get loose. Used among rocks and stumps which would soon break any other harrow to pieces. Price 16 teeth, \$11. Discount for cash, \$1.00.



Big 5 Jr. Spike-Tooth Smoothing Harrow (26)

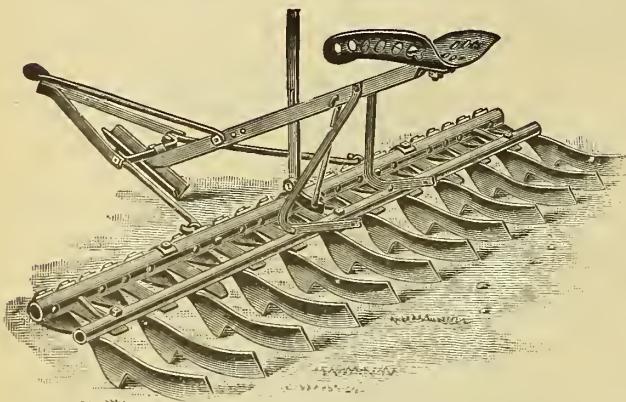
Designed as a leveling harrow, and for covering all kinds of grain and grass seed; also largely used for cultivating corn and potatoes just after they come up. The teeth are adjusted by means of a lever and can also be thrown up from the ground and harrow transported to and from the field on the shoes at the end. Each tooth is held in place by two bolts, while nearly all other harrows use but one. Teeth can be moved down as they wear. The entire harrow is made of steel. Price, 60 teeth, \$14; 50 teeth, \$13; Dis. for cash, \$1.

Dunham All-Steel Two-Horse Land Roller (27)

With solid steel head. Cannot break and will not fill with gravel and stones. The most durable roller made.

Roller Bearings used on all Dunham Rollers

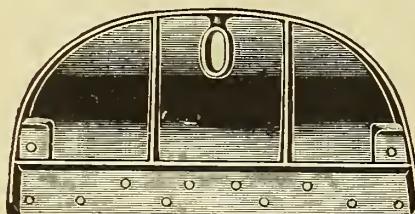
These minimize friction and make the machine run about 40% easier than the old style of bearing. Has 1 1/2" axle lathe-turned to a glass-like smoothness. Axle is held in place by a take-up washer and cotter pin and over the end is placed a cap which makes the bearing absolutely dirt proof. All machines have angle steel frame, weight boxes and the seat balances the weight of the pole, relieving the horses of neck weight. All of these are valuable features and should be on the Roller you buy, for you want the best. No. 6—6 feet, 24-inch diameter, \$24. No. 7—7 feet, 24-inch diameter, \$25. No. 8—8 feet, 24-inch diameter, \$26. All rollers have three sections. 5% off for cash.

The "Acme" Pulverizing Harrow (28)

A general purpose harrow that will crush, cut, lift, turn, smooth and level the soil to perfection, all in one operation. While pre-eminently adapted for heavy, stubborn land, it can be adjusted, by means of the level and runners, to do perfect work on the lightest soil. It cuts the entire surface, without disturbing sods or trash that has been turned under by the plow. It prepares a perfect seed bed, and also covers seed in the best manner. The draft is reduced to a minimum. Being made entirely of cast steel and wrought iron, it is practically indestructible.

Price—No. 23. Regular size, 1 and 2 horse, made in two sections. List price, \$18. Discount for cash, \$1.

No. 17. RIGID FRAME. List price \$17.00. Discount for Cash, \$2.00.

Cast Iron Boat Head (29)

32" Wide

The illustration below shows a simple device whereby a stone boat can be made in a few minutes by using a straight plank with the addition of the Iron Head. Anyone in need of a stone boat will readily see how easy it is done, and as one head will last for years, it is not only cheap but durable.



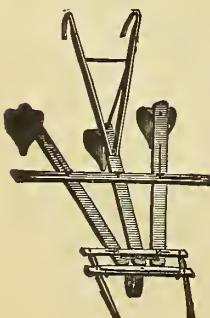
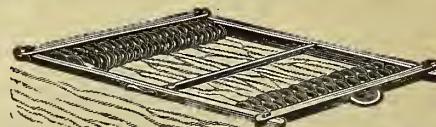
BOAT COMPLETE. 7 ft. long
Price of Head Only, \$3.50.
Boat Complete, \$7.50.
Bolts for above 60 cts. a set.

The Goslee Improved Marker (30)

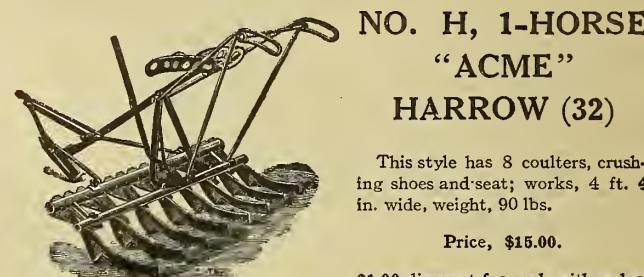
Adjustable Tooth. Spreads 2 to 4 feet.

This machine is designed to mark out rows of any width, and in doing so it makes a furrow suitable for planting. Price, \$7.50.

Discount for cash, 50 cts.

**Meeker Smoothing Harrow (31)**

This consists of a frame with four sets of rollers and 58 steel discs, which work between each other. The discs grind all lumps very fine and mash small stones below the surface better than any field roller. Regular size, 6 ft. 8 in., by 6 ft., weight, 220 lbs., price, \$20. Net cash price, \$18. Special size, 4 ft., 6 in., by 4 ft., weight 200 lbs., price, \$18. Net cash price, \$16. Special size, 8 ft. by 6 ft., weight 250 lbs., price, \$25. Net cash price, \$23.



**NO. H, 1-HORSE
"ACME"
HARROW (32)**

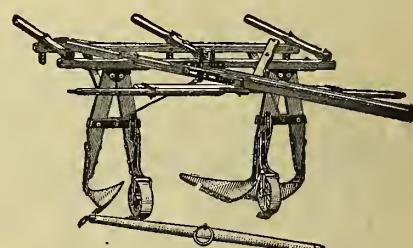
This style has 8 coulters, crushing shoes and seat; works, 4 ft. 4 in. wide, weight, 90 lbs.

Price, \$15.00.

\$1.00 discount for cash with order.

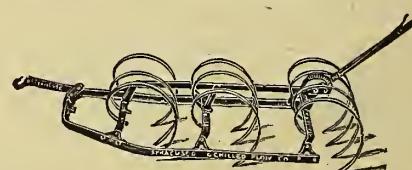
Prout's Two-Horse Hoe (33)

To those unacquainted with this machine will undoubtedly prove of interest. Each Standard as shown in the cut has two Hoes attached, and in working one set of hoes work on one side of the hill and the other on the opposite side, hoeing a row at a time. The hoe operates same as a hand hoe, moving fresh earth to the plant, and crowding the old dry earth away from the plant, the work being done much more quickly and thoroughly than when hand hoes are used. Unlike the cultivators and horse hoes now in common use, the whole Surface for the distance of two feet, more or less, on each side of the plant is cut over, and all the weeds removed. The hoes being made tapering permit of cutting close up to the plant without injury to corn roots which run close to the surface.



Price, with Wheels, \$21.00. Discount for cash \$1.00.

Price, no Wheels \$19.00. Discount for cash \$1.00.

Syracuse One-Horse Spring Harrow (34)

In this harrow, the frame, tooth bars and teeth are of steel, and all castings malleable, making a light and strong cultivator. The teeth adjust for wear, and the frame is protected underneath with renewable shoes. The lever assists in maintaining a uniform depth of cut, also in quickly unloading the cultivator of trash.

Has ten spring teeth, oil-tempered, and is adapted for all kinds of work. Has given perfect satisfaction.

Price, \$10. Discount for cash, \$1.00.

JOHN DEERE SPREADER

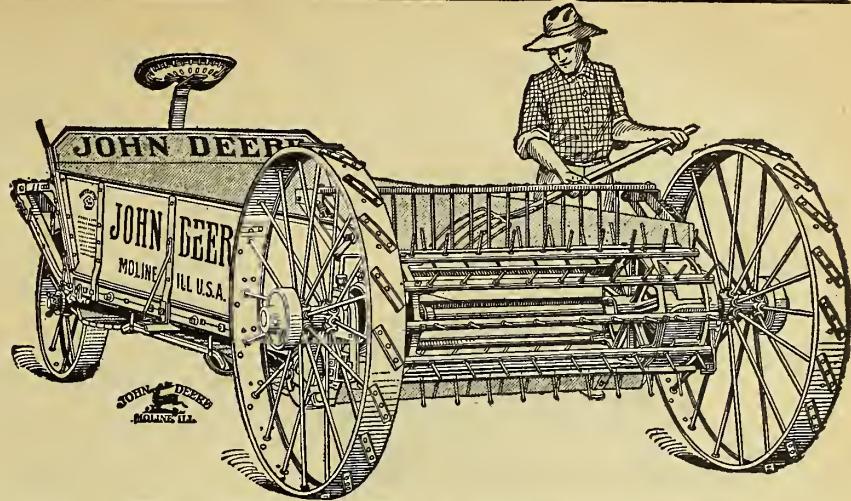
(35)

With Beater on the Axle

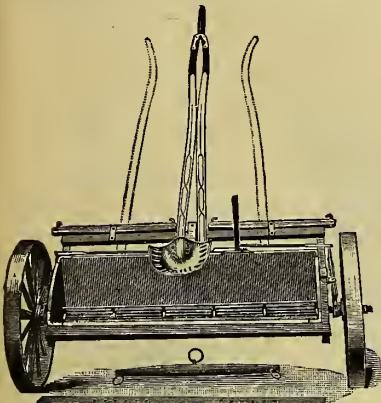
All the working parts of this spreader are mounted on the main axle. No clutches to give trouble, no chains to get out of line, no adjustments to be made. This is one of the latest spreaders to go onto the market, very easy to load and has very few parts. The manufacturers claim one hundred parts less than used on any other spreader.

The change of feed is accomplished by a double shoe which is moved from the seat. This shoe determines the number of teeth the ratchets engage at each stroke. Whether spreading five or twenty-five loads to the acre, the stroke of the ratchet arms is always the same. It has an endless apron and the ratchet feed is locked, steady and positive, and can be speeded up to spread the last part of the load. An endless apron on a spreader has many advantages. Larger loads can be hauled and spread.

The beater is made entirely of steel, and there is no chance for it to warp, split, twist or get out of shape. It has ten bars made of high carbon channel steel to which the teeth are fastened. Price, \$120.



THE STEVENS FERTILIZER SOWER (36)



For sowing all kinds of commercial fertilizer, either damp or dry, in drills or broadcast. Thoroughly satisfactory as a lime spreader. In meadows and orchards almost a necessity. Unequalled for top-dressing grass lands, lawns or large parks.

*5 ft. 10 in., list price, \$45. Net cash price, \$38.
8 ft. 3 in., list price, \$48. Net cash price, \$42.50.
10 ft., list price, \$50. Net cash price, \$45.50.
*In stock.

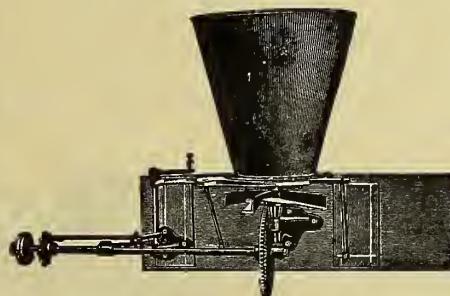
20th CENTURY MANURE SPREADER

The Low 20th Century is a low down spreader of light draft and has all the advantages that go with a spreader of low down construction, with the added advantage that it has sufficient clearance space under the machine to allow its use in any place from which and in which a load can be drawn. The main frame, trucks and axles are all steel and will stand up to the work and give length of service that no other spreader will give. Price \$110. Discount for cash 5 per cent.



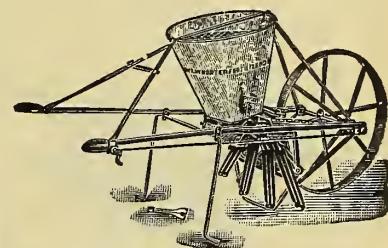
Model A, width 6'6", capacity 350 lbs., \$45.00
" B, " 8'6", " 475 " 59.00
" C, " 6'8", " 475 " 54.00

FARMER'S FRIEND FERTILIZER SOWER (37)

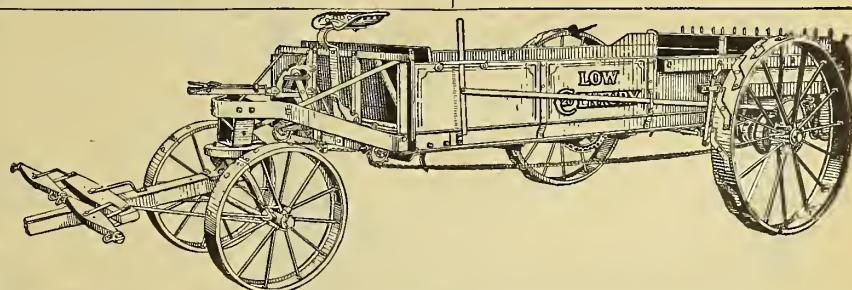


Attaches to any ordinary farm wagon, and sows to perfection grass and grain seeds of all kinds and in any desired quantity per acre, 50 to 100 acres a day. It also distributes all dry commercial fertilizers; also ashes, land plaster, lime, etc. It has a positive feed and an adjustment opening the holes from $\frac{1}{4}$ to $1\frac{1}{2}$ inches, which allows the sowing of seeds of any size; the flow can be shut off anywhere, either on one side or the other, or altogether, as required; it is instantly thrown in or out of gear. Price, complete to attach to wagon, \$10. Discount for cash, \$1.

McWhorters Hand Fertilizer Sower (38)



This fertilizer sower can be instantly changed so that the stream is divided from one into two or more streams, and thus be applied beside or on two or more rows of plants at the same time. The spouts or channels through which it passes to the ground open and close, so that starting with a width of about 4 inches the spread can be gradually increased to 30 inches. This is especially adapted for top dressing strawberry beds and lawns. Price \$12. Discount for cash, \$1.



THE GREENWOOD LIME AND FERTILIZER DISTRIBUTER (40)

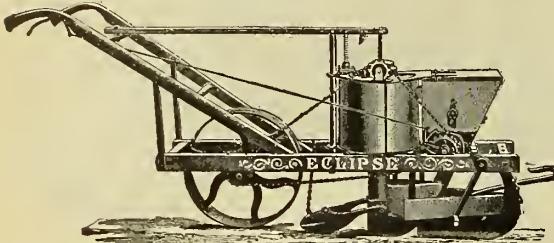
The Greenwood Fertilizer Distributer consists of a box with a movable bottom and front side resting in a slide and connected in such a way by racks, gears and crank, that when the axle turns in a forward direction they rise until the bottom is level with the top of the back side. When this point is reached, the raising gear is thrown out automatically and the bottom and front may then be dropped into position and the box refilled.

A roller suspended on the cover over the top of the box, revolves in a counter-clock-wise direction and forces the fertilizer or material used over the back as it rises with the movable portion of the box. This roller is automatically removed from its position over the box whenever the cover is opened.

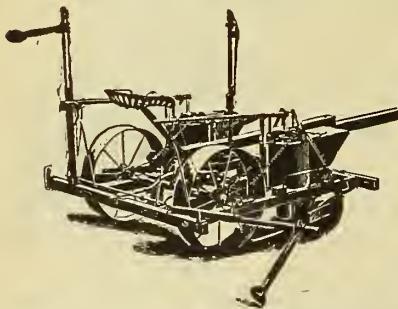
The roller serves to break up any lumps and forces the fertilizer over the back as it rises with the movable portion of the box. The material then passes down between the back of the box and the hood and is applied about twelve inches from the ground.

Eclipse Corn Planter and Fertilizer Distributer (41)

Plants field or ensilage corn, beans, peas or beet seeds in hills, drills or checks; it will drop 6, 12, 24 or 36 inches apart. By scattering pumpkin seeds in with the fertilizer in filling the hopper will place seeds in hills when planting corn. It accurately distributes from 50 to 450 lbs. as desired, of commercial fertilizer, wet or dry, in the rows of hills, first drawing moist earth on the seed before the fertilizer is dropped each side of the seed, and all is covered to a uniform depth. Price complete, \$21; discount for cash, \$1.



ECLIPSE Two-Row Two-Horse CORN PLANTER (42)



team at end of rows. Price, \$50. Discount for cash, \$2.50.

Automatic Hand Corn Planter (43)



Very handy for replanting and for small gardens.

PRICE, \$2.00

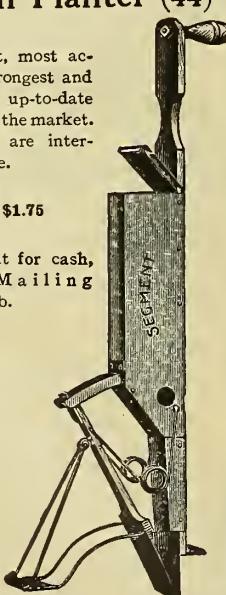
Discount for cash, 25 cts. Mailing weight 5 lb.

The Segment One-hand Corn and Bean Planter (44)

Lightest, most accurate, strongest and most up-to-date planter on the market. All parts are interchangeable.

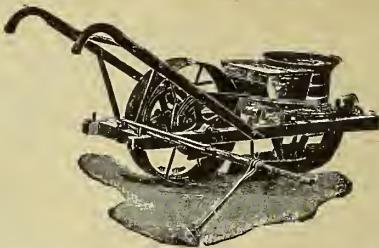
PRICE, \$1.75

Discount for cash, 25 cts. Mailing weight 4 lb.



"KING OF THE CORNFIELD" (45)

Corn, Bean and Pea Planter and Fertilizer Distributer



Does perfect work, not only in planting corn in hills or drills, but does equally as good work planting peas, beans, and all similar seeds, putting in the fertilizer as well, in any desired quantity, or the fertilizer may be stopped off altogether, if desired. Another great feature in this machine, corn and beans may be planted at the same time in the same row, the beans half way between the corn, or 4½ or 9 inches from corn, as desired. The fertilizer may be put with the corn and left out of the beans, if desired to do so. List price, \$21; discount for cash, \$1.

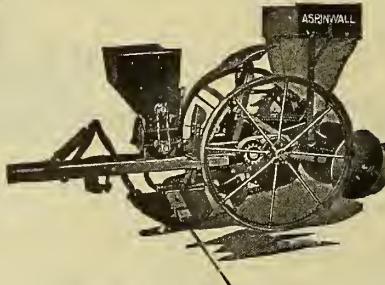
NISCO TRANSPLANTERS

NISCO TRANSPLANTERS are the perfection of the New Idea Spreader Co. and are so constructed that they will transplant tobacco, cabbage, strawberries, sweet potatoes and other plants that require resetting.

By means of the sub-frame arrangement the machine will work on eleven inch ridges, level ground or in five inch furrows.

The seats for dropper boys are set in front of the driver so that they may be watched at all times and are safe in getting off and on the machine. Equipped with either press wheels or press plates as desired. Price \$65.

Aspinwall Potato Planter No. 3. (46)

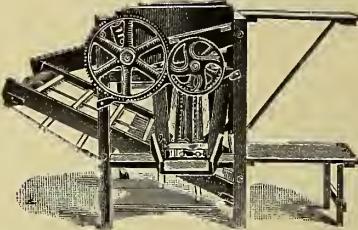


THIS MACHINE PLANTS A GREATER RANGE OF SEED, both as to size and shape, than ever before and handles it with the least possible friction or wear. To regulate the distance of planting—simply a change of gear wheels, which can be made in less time than it would take to replace one picker. In lieu of the cumbersome wooden structure, a CANVAS HOPPER has been substituted, which overcomes all tendency to clog or bridge with either whole

or cut seed, BOTH THE FEED AND COVERER TENSION ARE REGULATED FROM THE SEAT, NO removal of bolts—simply turning a thumb screw does the work.

List price, with fertilizer attachment and disc coverers, \$75. Discount for cash, \$6.

THE CHICOPEE CORN HUSKER



This is the most useful machine for the individual farmer for both stalk and picked corn. A six horse power gasoline engine will run it to its full capacity and will husk from 25 to 50 bushels an hour, according to condition and quality of the corn. The CHICOPEE is guaranteed to husk the corn and separate the ears from the stalks without material injury to the grains of corn. Price, \$100. 5% discount for cash.

Testimonial letter from a satisfied customer written December 2, 1915.

Ross Bros., Worcester, Mass.

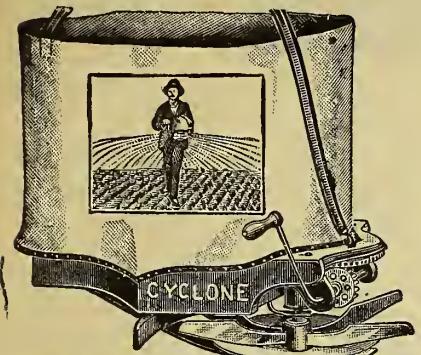
Dear Sir:

The corn husker I bought from you last fall gave grand satisfaction. Would recommend it to anyone.

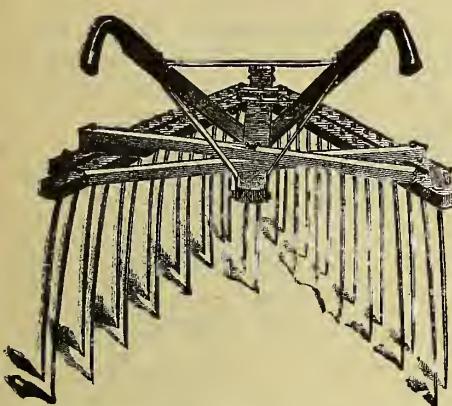
No. Grafton, Mass.

Very truly yours,
JOSEPH ADAMS.

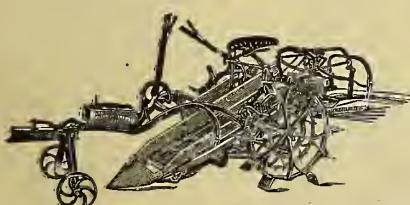
Owing to the Unsettled Condition of the Market, due to the War, All Prices quoted in this Catalogue are Subject to Change Without Notice.

The Cyclone Broadcast Seeder (48)

This is the cheapest and best of the hand seed sowers on the market, and everyone sowing one acre or more of grass seed or grain cannot afford to be without it. Will sow Timothy, Clover, Wheat, Oats, Rye, Buckwheat, Hungarian, Red Top, Millet and all other grains and seeds perfectly even, and any desired amount to the acre, and from 40 to 60 acres a day. The machine is first class in every respect. We guarantee the seeder to give satisfaction, or money refunded. Net price, \$1.50. Mailing weight 2 lb.

Keystone Adjustable Weeder (49)

Expands to 7 feet; can be closed to 3 feet. Used for leveling. Price \$10, round teeth; with flat teeth, \$11.

The Hoover Potato Digger (50)

The standard potato digger of the East. This digger harvests the entire crop. The hill is lifted by the shovel which carries the potatoes, earth and all to the traveling apron where a complete separation is made, the potatoes being dropped at the rear and are not covered with dirt or trash. Potatoes are left in a narrow row and not scattered and can be easily picked up. The separation of the potatoes from the dirt is complete, and potatoes are not cut or bruised in the operation. Price, \$100. 5% discount for cash.

Thompson's Seeder (51)

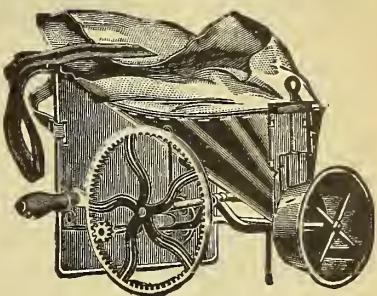
For Broadcasting Grass, Corn, Oats, Red Top, Clover, Timothy, and all Mixed Seeds. Light, strong, and simple.



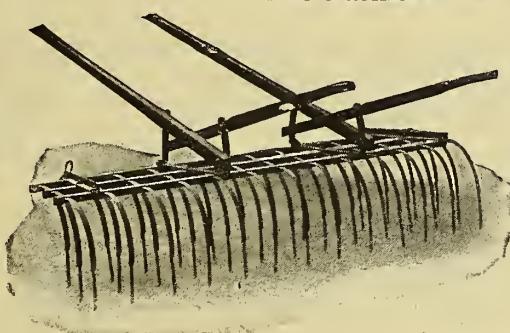
Sows uniformly the whole length of the hopper, twelve feet. It has no cam or cog gearing to get out of order. It has a positive motion, and works as freely and easily when sowing as when empty.

SEEDER No. 5. Sows all varieties of Clover, Timothy, Hungarian, Millet, Alfalfa, Chaffy Seeds, like Red Top, Orchard Grass and Kentucky Blue Grass. This style machine is made expressly for New England trade. List price, \$10. Discount for cash, \$1.50.

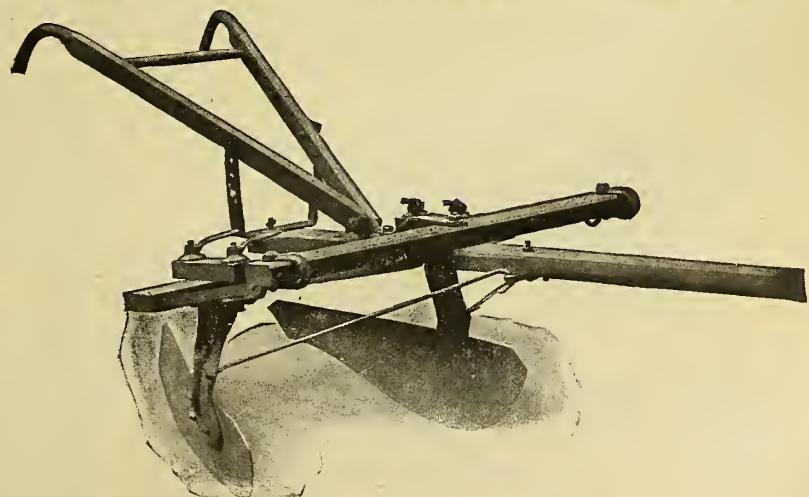
No. 4. Grain Seeder Box, 10 feet, for sowing all kinds of grain. This box fits on to No. 5 Seeder, and with both boxes all kinds of grain and grass seeds can be sown. List price, \$5. Discount for cash, \$1. No. 5 Seeder and No. 4 Grain Box. List price, \$15. Discount for cash, \$3.

Cahoon's Improved Broadcast Seed Sower (52)

Will sow all kinds of grass and grain seeds from 4 to 8 acres per hour at a common walking gait. Heavy seeds, such as wheat, it will throw 40 feet (20 from each side of the operator); lighter seeds, of course, will not be thrown so far. Price, \$3.50. 8 lbs.

THE WORCESTER WEEDER (53)**The Farmers Best Friend**

One of the indispensable articles on any farm, where horse cultivated crops are grown, or where corn or grass seeds are sown. This weeder is made of high carbon angle iron steel, teeth attached to frame with bolts and are held tight by a spring steel lock washer. The teeth are the best that can be made and set on the right curve to do the most and best work. This is the best implement made for preparing a seed bed and will pay for itself in one season. In cultivating corn it should be used just before the crop is up and immediately after. Destroys the weeds but does not injure the crop. Price \$10.00. \$1.00 discount for cash.

The Worcester Horse Hoe and Furrower (54)

The best implement made for furrowing, covering and hilling potatoes and similar crops. The steel covers or wings can be adjusted for making any style of hill desired in furrows uniform width. All potato growers know the value of this tool and none of them attempt to get along without it. It is necessary to cover young plants completely when just out of the ground. The steel hiller are made of the best crucible spring steel and will last for a lifetime. Price \$7.00; 50c discount for cash.



Planet Jr. Garden Tools



The New "PLANET JR." Catalogue is the handsomest, best, and most instructive book ever issued on a similar subject. Full of little points that bring profit. Full of true and handsome illustrations. We mail it free to any address on application.

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

Price, Complete, \$11.00

Weight, 50 lbs.

As a Seeder Only, \$9.00

Holds 2½ Quarts of Seed

Equipment: One pair of 6-inch hoes, Three cultivator teeth, One garden plow, One leaf guard. Steel Driving Wheel.

Plants in hills
4, 6, 8, 12 or 24
inches apart.

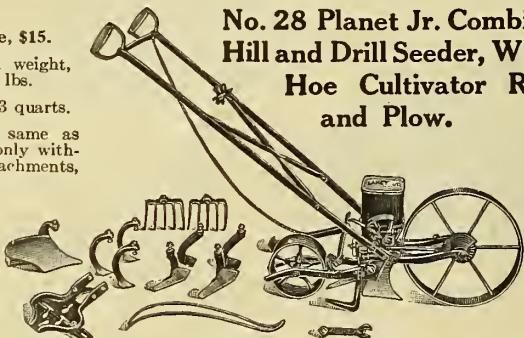
For use as a
cultivator, the
drill parts are
removed and
the tool frame
substituted by
changing but
one bolt; it is then a perfect single wheel hoe, with a variety of tools, and a rapid
change frame, with side extension for hoeing both sides of a row at one passage.

Price, \$15.

Packed weight,
71 lbs.

Holds 3 quarts.

No. 29 same as
No. 28 only without
attachments,
\$11.50.



Equipment: One pair 6-inch hoes, One pair 4½-inch hoes, One pair 5-tooth rakes, Three cultivator teeth, One landside plow, One leaf guard, One marking attachment, Steel handles.

This is the latest Combined Hill and Drill Seeder and Single Wheel Hoe. It shows in its construction the results of the last three years' close study of this class of tools and is the culmination of forty years' experience.

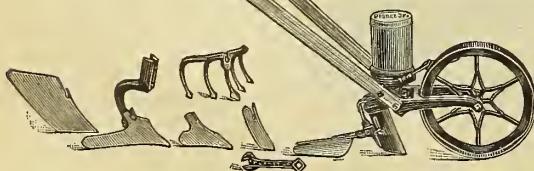
It is the most accurate seeder in action and the nearest perfect in construction ever offered.

No. 31 Planet Jr. Combined Drill Seeder and Single Wheel Hoe.

Price, \$7.00 Weight, 30 lbs.

Equipment: One large garden plow; One 5-inch sweep; One 10-inch sweep; One 2-inch Cultivator tooth; One 5-tooth prong hoe.

Packed weight, 35 lbs.



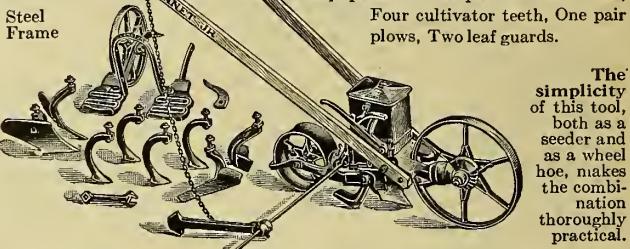
It is thoroughly well made and offered at a price that makes it pay the smallest gardener. It will sow even a small packet of any garden seed any thickness desired with the greatest precision from $\frac{1}{2}$ to 2 inches deep, in a narrow row. Women, younger or older, will find in this tool a light running wheel hoe that will save them hard work and help much to supply the table with fine vegetables.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe, Cultivator and Plow.

Price, \$13.50

Weight, packed, 61 lbs.

Holds 2½ Quarts of Seed



The simplicity of this tool, both as a seeder and as a wheel hoe, makes the combination thoroughly practical.

Two acres a day can easily be worked with this implement, and when it is done, it will be a better job than several men could have done in the same time with hand hoes.

No. 6 Planet Jr. Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow Combined.

Price, Complete, \$13.50.

As a Hill and Drill Seeder Only, \$11.00.

Weight, complete, 64 lbs.



Equipment: One pair 6-inch hoes. Three improved steel cultivator teeth. Large garden plow, improved double leaf guard. 16½-inch steel wheel.

No. 6 is a combined Drill and Wheel Hoe of recent pattern. It drops seeds in hills or drills with perfect regularity and marks the next row. It drops in 4, 6, 8, 12 and 24 inches and it takes less than a minute to change from one distance to another. The seeds fall in full view as the rear of the spout is open and has a white lining. It can also be used as a single wheel hoe by removing the seeder attachment.

No. 3 Planet Jr. Hill and Drill Seeder

Price, \$10.50

Holds 3 Quarts of Seed
Weight, packed, 43 lbs.



A favorite among onion growers, market gardeners and seedsmen.

The driving wheel is steel, with heavy forged steel spokes, making the tool light and easy running, even with the hopper filled to the brim.

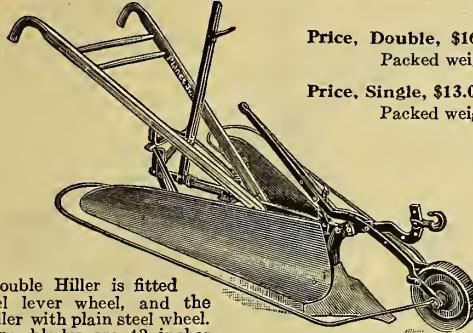
The special force feed is admirable, working equally well whether sowing with an ounce or a full hopper.

The hill dropping is simple and reliable; making hills either 4, 6, 8, 12 or 24 inches apart.



Planet Jr. Tools

Planet Jr. Double and Single Celery Hillers



The Double Hiller is fitted with steel lever wheel, and the Single Hiller with plain steel wheel. The hillling blades are 43 inches long, adjustable in width or height as wanted; the Double machine works all rows up to four feet apart. The Single machine works all widths, and where market-gardeners plant close and first bleach every other row, it is "just the thing."

No. 101 Planet Jr. Plain Cultivator

Price, \$5.50. Weight 55 lbs.

Equipment: Five 3 x 8-inch Cultivator steels, Lever Expander.



This machine is the "latest word" in design. The lever, instead of standing perpendicular, slants backward between the handles, free from danger of being bent or broken, and prevents injury to crops under cultivation. While the design is one of simplicity, it is very

strong and most accurate in its work, and the tool has so few parts that there is no danger of its ever getting out of order.

No. 72 Planet Jr. Two-Row Pivot Wheel Cultivator, Plow, Furrower and Ridger.

Price, Complete, \$52.50

With Cult. Teeth and Plant Guards, Only \$50.00

Weight 585 lbs.

Equipment:

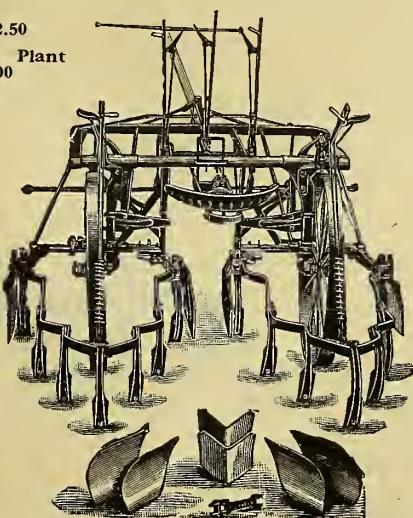
Fourteen 2½ x 8-inch cultivator steels.

Two pairs reversible 7-inch plows.

Two 8-inch shovels,

Two pairs plant guards.

Spring lift.



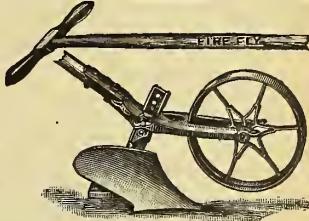
With the improved No. 72 we complete the cultivation of two rows at one passage, at all widths from 28 to 44 inches inclusive, and the implement is especially built to do this when the rows are irregular. This tool is so designed that the operator can make changes in width of gangs instantly while in motion, by means of a handy lever for each gang, so as to accommodate the machine perfectly to rows which vary greatly in width. The wheels and gangs can be easily changed for crops planted different widths apart.

Fire-Fly Garden Plow

Price, \$2.35
Weight 14 lbs.

THIS TOOL IS EXCEEDINGLY USEFUL to owners of small gardens. It will throw a furrow four to six inches wide and one to three inches deep, and deeper by going a second time in each furrow. It makes fine furrows for manure or seeds and covers them, and makes up rows for all kinds of plant setting. In cultivating, plow away, weed the row and plow back again; nothing more thorough than this. After the furrow is thrown away from the crop lightly, leave it a few days before throwing back. This tool will enable a busy man to do in his spare minutes nearly all the work of a family garden.

CHICKEN RAISERS find it of great advantage in plowing up their scratching yards.



No. 103 Planet Jr. Combined Horse Hoe and Cultivator

Price, \$6.50 Weight 60 lbs.

Equipment: Five 3 x 8-inch Cultivator steels, One pair 6-in. turning shovels, One 7-in. shovel Lever Expander, Lever Wheel.



The Plows are of special shape; of elegant proportion; useful in connection with the triangle in throwing furrows and afterwards covering them, and for plowing and hillling much or little, as desired. The tool has all the qualities of the regular horse hoes, though lighter and better adapted to many kinds of work where a heavy tool is not a necessity.

No. 76 Planet Jr. Pivot Wheel Riding Cultivator, Plow, Furrower and Ridger.

Price, \$45.00
Weight 528 lbs.

Complete with Spring Trip Standards (8) in place of Regular (76F)
\$50.00

Regular Equipment:

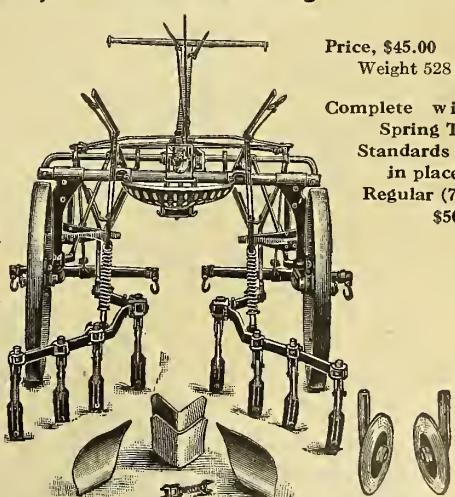
Eight 2½ x 10-inch cultivator steels.

One pair 7-inch plows.

Two 8-inch shovels.

One pair 14-inch discs.

Spring lift.



The No. 76 combines nearly all the advantages of other Planet Jr. riding cultivators. The combination of the best parts of these tools in one would seem to make a machine which would be without a rival in popularity and usefulness. The arch is high, frame and tongue are of steel and the change in width of the wheel is all that could be desired. It has powerful levers, and the gang frame is strong. The standards are adjustable for depth, and to throw to or from the row. The extra wide arch is very desirable. The draft is arranged to insure satisfactory work in all conditions of soil.



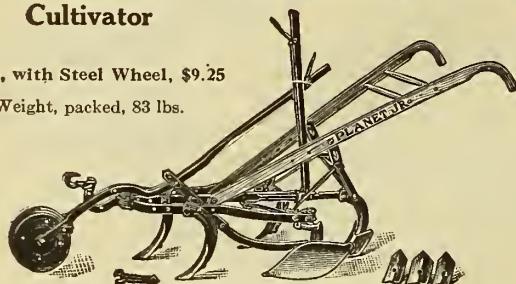
Planet Jr. Tools



No. 8 Planet Jr. Combined Horse Hoe and Cultivator

Price, with Steel Wheel, \$9.25

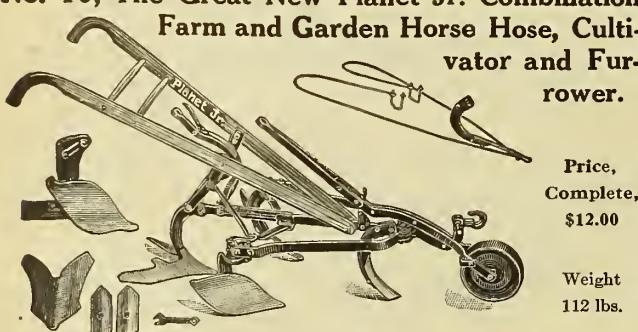
Weight, packed, 83 lbs.



Equipment: Four 3 x 8-in. plates, One 4 x 8-in. plate, Two 6-in. side hoes, One 7-in. shovel, Lever wheel, Lever expander. Depth regulator.

No other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle.

No. 10, The Great New Planet Jr. Combination Farm and Garden Horse Hoe, Cultivator and Furrower.



Price, Complete, \$12.00

Weight 112 lbs.

Equipment:—Three 3 x 8-inch cultivator steels. One pair 6-inch hillers. One plow attachment. One 15-inch fingered sweep. One 10-inch furrower, 1 vine turner, lever expander and lever wheel.

THIS NEW COMBINATION Planet Jr. tool is the latest and best of all Planet Jr. products of its class. It is the result of fifty years of close acquaintance with gardening and farming, and almost forty years of Planet Jr. manufacturing.

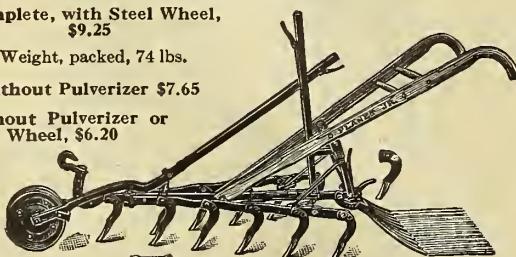
Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer.

Complete, with Steel Wheel, \$9.25

Weight, packed, 74 lbs.

Without Pulverizer \$7.65

Without Pulverizer or Wheel, \$6.20

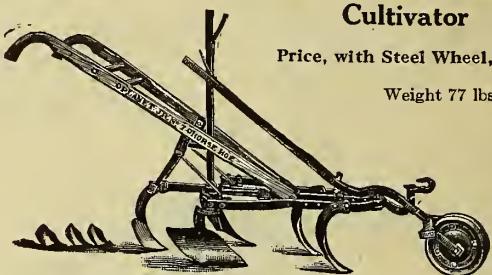


Gardeners cultivate better than formerly. It has been found to pay best. With the Twelve-Tooth Harrow you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil and mellow and fine it as with a garden rake. You widen and narrow as you please between 12 and 32 inches. It's a special favorite with strawberry growers, market gardeners and truckers.

No. 7 Planet Jr. Combined Horse Hoe and Cultivator

Price, with Steel Wheel, \$8.75

Weight 77 lbs.



Equipment: Four 3 x 8 plates, One 4 x 8 plate, Two 6-in. side hoes, One 7-in. shovel, Lever wheel, Lever Expander.

This Horse Hoe is identical with No. 8, except that it has no depth regulator. Every part is perfected to make the tool acceptable to the intelligent farmer who knows the best is always the cheapest.

No. 9 Planet Jr. Combined Horse Hoe and Cultivator

Price, with Steel Wheel, \$8.00

Weight, packed, 70 lbs.

Equipment:

Four 3 x 8-in. cult. steels
One 4 x 8-in. cult. steel.
One pair 6-in. hillers.
One 7-in. shovel.
Lever expander.

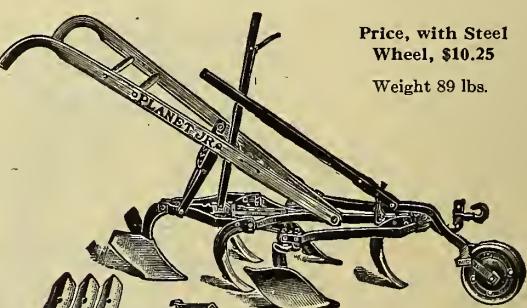


This admirable tool is identical with No. 7, except that it has a plain wheel instead of a lever wheel. It has the high frame, patented hollow steel standards, patent Steel wheel, patent lever expander, and hollow steel wheel arms.

No. 81 Planet Jr. Horse Hoe, Cultivator and Hiller Combined.

Price, with Steel Wheel, \$10.25

Weight 89 lbs.



Equipment: Six 3 x 8-in. cult. steels. One pair 6-in. hillers. One 12-in. lever expander. Lever wheel.

An admirable equipment for all widths of cultivation and for hilling crops up to four feet apart.

It has a cultivator tooth central in front, which increases the steadiness of the tool. This is followed by a group of teeth, of which the pair that work next to the plants are furthest forward and are adjustable for width by means of a convenient lever expander. Intermediate between these and the rear tooth, is a pair of teeth 13 inches apart.



Planet Jr. Garden Tools

No. 11 Planet Jr. Double Wheel Hoe, Cultivator Plow and Rake

Price with Attachments as in cut, \$9.00

Weight, packed, 39 lbs.

Equipment: One pair 6-inch hoes, oil tempered. One pair 4½-inch hoes, oil tempered. Four hollow steel cultivator teeth. One pair plows. Two 3-tooth rakes. Two 5-tooth rakes. Two leaf lifters.



The hoes are the most valuable of all the wheel hoe attachments; are oil tempered and polished.

The plows are invaluable; use them with points together for opening furrows for manure, seed, etc.

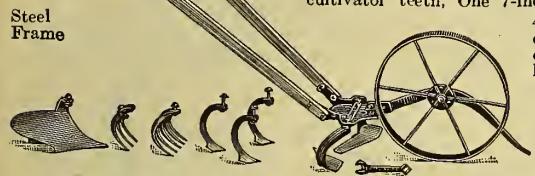
The cultivating teeth for deep or shallow work, and for marking out.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

Price \$5.85

Weight, 26 lbs.

Equipment: One pair 6-inch hoes, Three cultivator teeth, One 7-inch rake, One 4-inch rake, one large garden plow, One leaf guard.



Nos. 16, 17, 17½ and 18 wheels, frames and handles are alike, but the attachments sold with each vary.

No. 18 Single Wheel Hoe—Price, \$3.50 Weight, 19 lbs.

This has one pair of 6-inch hoes only.

No. 30 Planet Jr. Single Wheel Hoe, Cultivator, Plow, Rake and Marker

Packed weight, 44 lbs. Steel wheel. Steel frame. Steel handles.

Price, \$8.00



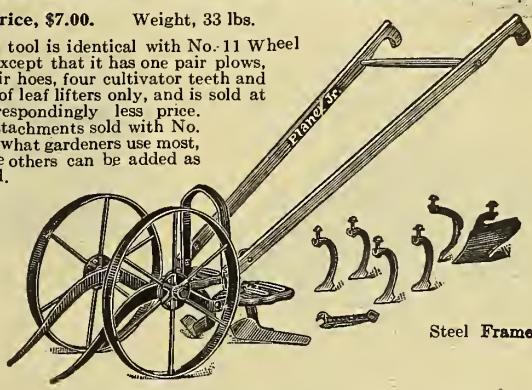
Equipment: One pair 6-inch hoes, One pair 4½-inch hoes, One pair 5-tooth rakes. Three steel cultivator teeth. One large plow, One marking attachment. One leaf guard.

This tool has a 15-inch wheel, and the wheel, the frame and the handles are all made of steel, so the tool is at once light and strong and almost indestructible.

No. 12 Double Wheel Hoe, Cultivator and Plow.

Price, \$7.00. Weight, 33 lbs.

This tool is identical with No. 11 Wheel Hoe, except that it has one pair plows, one pair hoes, four cultivator teeth and a pair of leaf lifters only, and is sold at a correspondingly less price. The attachments sold with No. 12 are what gardeners use most, and the others can be added as wanted.



No. 13 Double Wheel Hoe—Price, \$4.75.

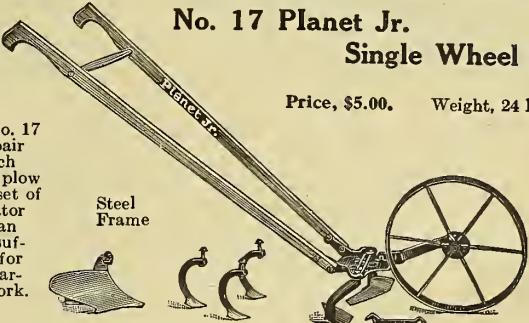
Weight 28 lbs.

This tool is the No. 11 with 6-inch hoes only, these being the tools that are most generally useful.

No. 17 Planet Jr. Single Wheel Hoe

Price, \$5.00. Weight, 24 lbs.

The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

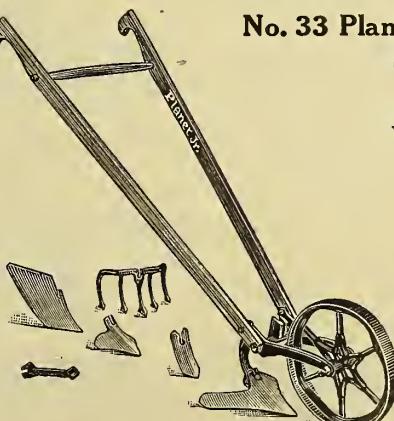


No. 17½ Planet Jr. Single Wheel Hoe—PRICE, \$4.50 Weight, 21 lbs.

The pair of 6-inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind.

No. 33 Planet Jr. Single Wheel Hoe

Price, \$3.00. Weight 24 lbs.

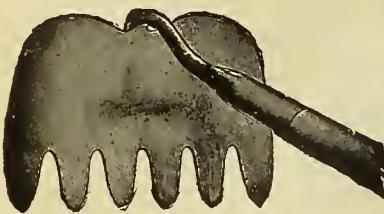


Equipment: One large garden plow, One 5-inch sweep, One 10-inch sweep, One 2-inch cult. tooth, One 5-tooth prong hoe.

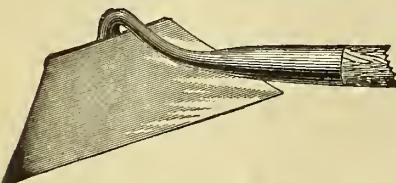
The large garden plow is constantly useful from spring to fall. Use the cultivator steel to open narrow furrows. The sweeps, of two widths, come into use during the whole season. The whole combination will delight the suburbanite or equally the growing boy who knows that a certain amount of garden work is to be part of his service.

Asparagus Buncher (95F)

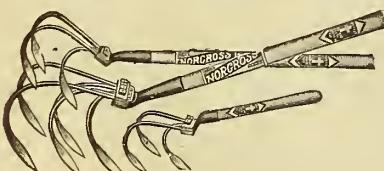
Price \$1.75
Mailing Weight, 5 lbs.
(95F)

Boothbay Toothed Hoe (275)

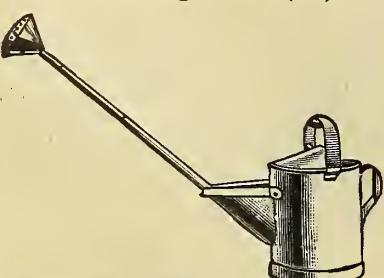
Price 65 cts.

Sunnyside Hoe (86)

The above cut shows the Sunnyside or Strawberry Hoe, invented several years ago by one of our largest strawberry growers and since then used by several of the leading fruit growers in the state. It is especially adapted for small fruits and close cultivation. Price, each 55 cts. Mailing weight 2½ lb.

Norcross Improved Hand Garden Cultivator (88)

A very handy garden tool. 5 prongs, 75 cts.; 3 prongs, 50 cts. Hand, 35 cts. Mailing weight 3 lbs.

Wotherspoon's Greenhouse Watering Pots (79)

Regular pattern, with extra long spout for greenhouse work, complete with two roses, coarse and fine. 10 qt., \$2.00. Mailing weight 5 lb.

Goodale's Asparagus Knife

Best asparagus knife made. Made of best steel, strong and rigid. Price, 40 cts. Mailing weight 1 lb.



**Cypress
Plant
Tubs
(80)**

OUTSIDE MEASUREMENT

No.	Bottom	Top	Deep	Price
1	11	13½	12	\$1.25
2	12	14½	14	1.50
3	13½	16	16	1.75
4	19	21	18	2.25
5	23½	24½	20	3.00
6	24	25¾	22	4.50

Arlington Slide Hoe (83)

Used by nearly all of the large market gardeners. Where there are no stones it will do excellent work and do it fast. Made in three sizes. 8 in., \$1.50; 9 in., \$1.65; 10 in., \$1.75. 3 lb. Handle not included by parcel post.

Scuffle Hoe and Handle (87)

6-in., 45 cts.; 7-in., 50 cts.; 8-in., 55 cts.; 9-in., 60 cts. Weight, 1 lb. Handle not included by parcel post.

Bush Hook (81)

A bush hook or chopper fitted with 36-in. handle that is almost indispensable for cleaning up small bushes, etc., around the walls and other inaccessible places. Bill Hooks similar to bush hooks only very short iron handle. Bill Hook, \$1.10, Bush Hook, \$1. Mailing weight 5 lb.

Steel Grass Hooks (85)

(85) ADJUSTABLE HANDLE GRASS HOOK
Patterned after a scythe and snath. Hangs just right. Made of steel. 50 cts.

PRIDE GRASS HOOK (not shown). Solid steel. Every one warranted. 50 cts. 1 lb.

NOLEN ALL STEEL CONCAVE GRASS HOOK. 50 cts. (Not shown.)

**Dunham Water Weight Lawn Roller (221)**

The Dunham Water Weight Lawn Roller is electric welded, making the water section one solid drum, no rivets are used. It cannot leak. The roller surface is perfectly smooth and cannot injure the lawn. The handle weights are to counter-balance the weight of the handle and keep it in an upright position off from the ground.

RETAIL PRICE OF DUNHAM WATER WEIGHT LAWN ROLLERS

No.	Diameter Inches.	Length Inches.	Sec- tions.	Weight Empty.	With Water.	Filled Price.
HW2	14	20	1	120 lbs.	260 lbs.	\$12.50
HW4	18	24	1	135 "	360 "	14.50
HW6	24	24	1	185 "	560 "	18.50
HW8	24	32	1	200 "	710 "	20.50

20% discount for cash.

We can furnish these same rollers without handle weight at \$1.50 less, f. o. b. cars at factory but with the weight the handle is always where you want it and never in the mud and is well worth the difference in price.

PRUNING SHEARS



R 275-\$1.75



99-\$1.25



60-.565

9215 4 inches long. Price, 50 cts.
Pruning Knife. Cocoa Handle.9553 3 3/4 inches long. Price, 50 cts.
Cocoa Handle. 2 Blades.6902 3 inches long. Price, 85 cts.
Stag Handle. 2 Blades.5665. 3 inches long. Price, \$2.
Pearl Handle. 2 Blades and file.

BENT NICKEL SHEARS

6 inches long	\$.60	8 inches long	\$.85
7 " " " " " . . . . .	.75	9 " " " " "	1.15
BENT JAPAN SHEARS			
6 inches long	\$.50	8 inches long	\$.70
7 " " " " " . . . . .	.60	9 " " " " " . . . . .	.85



NICKEL SCISSORS

4 inches long	\$.55	6 inches long	\$.65
5 " " " " " . . . . .	.60	7 " " " " " . . . . .	.75
JAPAN SCISSORS			
4 inches long	\$.40	5 inches long	\$.45
6 inches long	\$.50		



R 170-\$1.50



R 85-\$1.5



65-\$1.85



R 50-\$1.75



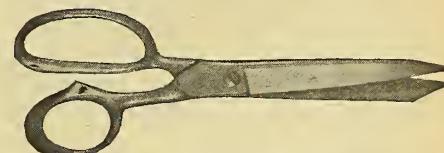
R 70-\$1.25



R 165-\$1.25

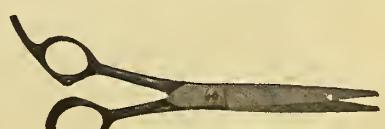


50-\$1.50

6425 4 1/4 inches long. Price, 75 cts.
Bone. 1 Blade.6409 3 1/4 inches long. Price, \$2
Pearl. 3 Blades.7226 3 inches long. Price, \$2.
Pearl. 2 Blades and Manicure9543 3 3/4 inches long. Price, 50 cts.
Cocoa Handle 2 Blades. Easy Opener9881 4 1/4 inches long. Price, \$1
Bone Handle. 2 Blades.7003 3 1/2 inches long. Price, \$1.25.
Gun Metal. 4 Blades.9851 3 3/4 inches long. Price, \$1.25.
Stag. 4 Blades.6652 3 1/4 inches long. Price, \$1.25.
Stag. 3 Blades and CorkscrewRAZORS
\$1.25 to \$3.50.STRAIGHT SHEARS
Nickel

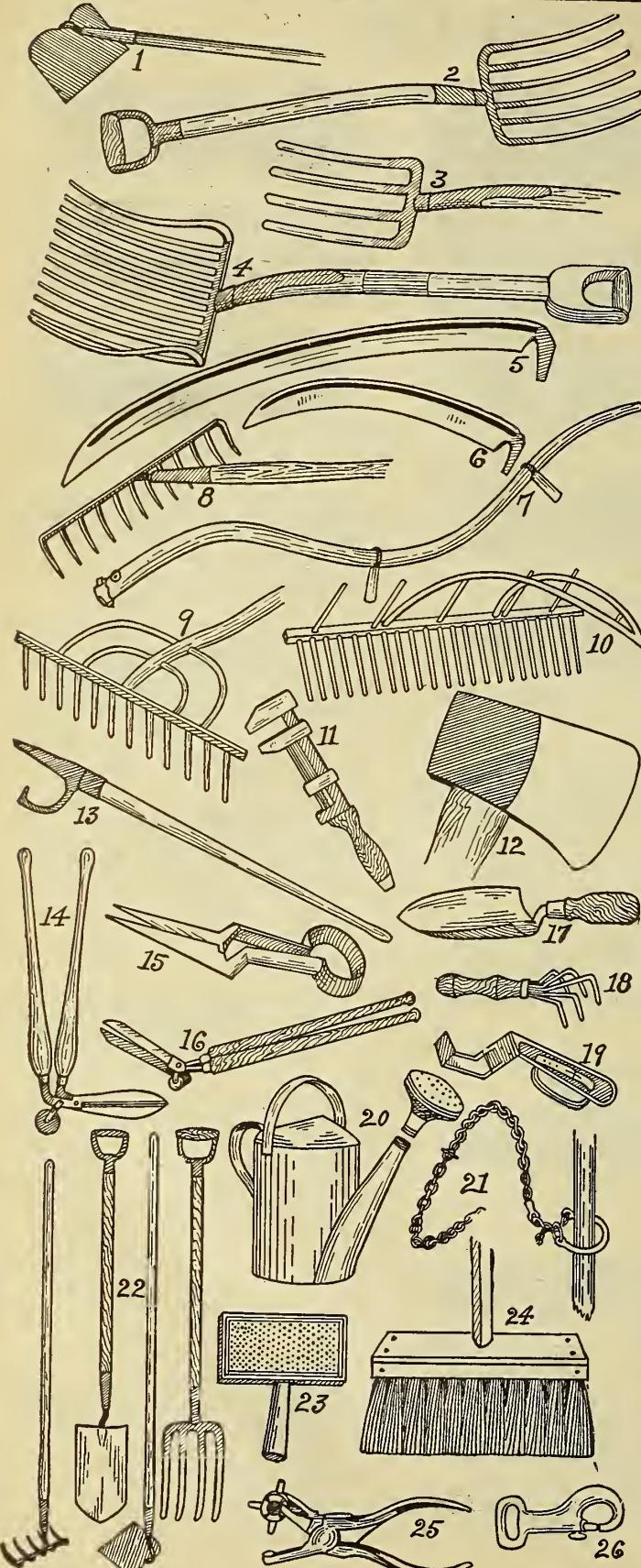
6 inches long	\$.55
7 " " " " " . . . . .	.70
8 " " " " " . . . . .	.80
9 " " " " "	1.00

Japan	
6 inches long	\$.45
7 " " " " " . . . . .	.55
8 " " " " " . . . . .	.65
9 " " " " " . . . . .	.75



BARBER'S SCISSORS

7 1/2 inches nickel	\$.75
7 inches, Japan . . . . .	.65



The following is a partial list of the large line of hand tools we carry.

In ordering give name, number and size.

No. 1. Hoes.

7½-8 in. Field Socket ..	\$.50
7½-8 in. Field Shank...	.45
8 in. Meadow Socket ..	.55
8½ in. " "	.55
9 in. " "	.55
9½ in. " "	.55
8 in. Meadow Shank ..	.45
8½ in. " "	.45
9 in. " "	.45
9½ in. " "	.45
9 in. R. I. Socket ..	.60
9 in. R. I. Shank ..	.55
Ladies' .....	.40
Boys' .....	.40
Square Top Onion ..	.45
9 in. Mortar ..	.60
10 in. Mortar .....	.65

No. 2. Manure Forks.

4 Tine, Long Handle, Strapped ..	.70
4 Tine, Iron D Handle, Strapped ..	.75
5 Tine, Iron D Handle, Plain ..	.85
5 Tine, Wood D Handle, Plain ..	1.00
5 Tine, Long Handle, Strapped ..	.90
5 Tine, Iron D Handle, Strapped ..	.95
5 Tine, Wood D Handle, Strapped ..	1.10
6 Tine, Iron D Handle, Plain ..	1.00
6 Tine, Wood D Handle, Plain ..	1.15
6 Tine, Long Handle, Strapped ..	1.15
6 Tine, Iron D Handle, Strapped ..	1.10
6 Tine, Wood D Handle, Strapped ..	1.20

No. 3. Spading Forks.

4 Tine, Iron D Handle, Plain ..	.75
4 Tine, Wood D Handle, Plain ..	.85
4 Tine, Iron D Handle, Strapped ..	.80
4 Tine, Wood D Handle, Strapped ..	.90
4 Tine, Long Handle, Strapped ..	.75
5 Tine Iron D Handle, Strapped ..	1.00
5 Tine, Wood D Handle, Strapped ..	1.10

No. 4. Coke Fork

10 Tine 1¼ in. between Tines ..	1.60
12 Tines, 1¼ in. between Tines ..	1.75
14 Tines, 1¼ in. between Tines ..	2.00

No. 5. Scythe

Clipper.....	\$.75
Foster, all steel .....	.90
Damascus steel	1.00

No. 6. Brush Scythes

\$.75
2

No. 7. Scythe Snath,

Ash.....	.75
Bush Snaths.....	.75

Mailing
Each Wgt.

No. 8. Steel Rake.	
12 Tooth, iron	.25
steel	.45
14 Tooth, iron	.30
steel	.50
16 Tooth, iron	.35
steel	.55

No. 9. Rake.	
2 X, 3 Bow, Bent	.40
X, 3 Bow, Bent	.30
Lawn Rake, 24	
Teeth, X	.40
Extra 24 Teeth.	.50
No. 10 Drag Rake	.75

No. 11. Wrench.	
8 in....25 10 in.30	

No. 12. Foster Axe	.75
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Hickory King
(Warranted), Axe 1.25
Black Jacket Axe 1.00

No. 13. Cant Hooks	1.25
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No. 14. Lawn Shears	2.75
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No. 15. Grass Sheers	.25 and .50
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No. 16. Lawn Shears	3.00
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No. 17. Garden Trowel,	
6 in. Steel20

No. 18. Secor Weeder	.10
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No. 19. Noyes Weeder	.20
----------------------	-----

No. 20. Watering Pot.	
4 quart.....	.45
6 quart.....	.50
8 quart.....	.55
10 quart.....	.60
12 quart.....	.65
16 quart.....	.75

No. 21. Cow Tie.	
3½ feet.....	.30
4 feet.....	.35
4½ feet.....	.40

No. 22. Garden Sets.	
----------------------	--

1. 3 pieces.....	.10
2. 3 pieces.....	.15
3. 3 pieces.....	.25
4. 4 pieces.....	.50
4 Piece set (not shown) a fine warranted set	1.25

No. 1, large leather, bound12
-----------------------------------	-----

No. 2, large leather, not bound..	.10
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No. 3, small leather, bound10
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No. 4, small leather, not bound08
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No. 24. Rattan Brush Broom.	
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5 row, 14 inches.	.50
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5 row, 16 inches.	.55
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6 row, 16 inches.	.60
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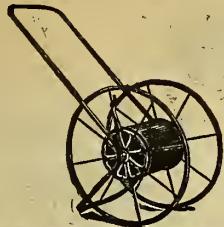
No. 25. Revolving Harness Punch.	
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4 Tube.....	.50
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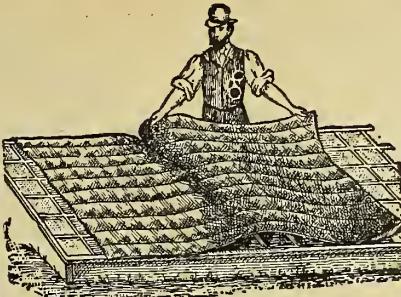
5 Tube.....	.60
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No. 26. Harness Snaps.	.03 to .08
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For parcel post rates see inside front cover.



TUBULAR METAL HOSE REEL (90). The most durable reel made. Holds 100 feet of hose. Price, \$3.50.



(95E)

Our 7-ply Nobust brand of Garden hose is made especially for us by the largest hose manufacturer. It has a high grade seamless tube, which is the life of the hose. A chain is no stronger than its weakest link — so a piece of Garden hose will last no longer than its rubber lining. Over this rubber tube, which has been given a coating of pure gum cement, there is wound by a special machine seven layers of closely woven fabric which have been thoroughly impregnated with high grade rubber; then over this there is a tough, strong rubber cover which protects the fabric and hose from external wear. The seven plies and strong friction between them enable the hose to stand the highest water pressure; and every length is fully guaranteed and bears our name and brand. Our price is low and attractive for this high grade hose to enable us to sell the maximum amount as we are desirous of making it our best seller and a hose that will make many friends for us.

We handle other standard brands of hose. The prices below are for 25 or 50 foot lengths and no charge for coupling:

Nobust.

1/2"	14 cts. ft.	3/4"	16 cts. ft.
Bull Dog.		7 ply	
5/8"	18 cts. ft.	Tiger	
		6 ply	
1/2"	11 cts. ft.	3/4"	13 cts. ft.
Leader		5 ply	
1/2"	9 cts. ft.	3/4"	11 cts. ft.
Cotton			

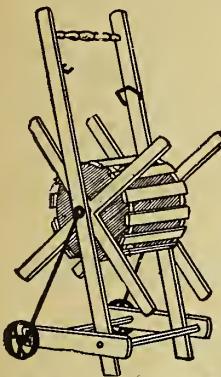
1/2" 12 cts. ft. 3/4" 14 cts. ft.
25 and 50 foot lengths only.

HOSE MAILING WEIGHTS

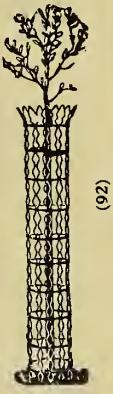
25 ft. Bull Dog	1/2"	8 lbs.	3/4"	10 lbs.
25 ft. Tiger	1/2"	6 lbs.	3/4"	9 lbs.
25 ft. Leader	1/2"	6 lbs.	3/4"	9 lbs.
25 ft. Cotton	1/2"	6 lbs.	3/4"	8 lbs.

SPRAY HOSE.

We have succeeded in getting a spray hose which we can unconditionally warrant. This is a special brand of hose made particularly for orchard spraying with any kind of insecticide and will withstand the most severe tests. The inner tube of this hose is constructed of a rubber which will resist any acid used in spraying, thereby giving long life to the hose. In placing this hose on the market and in offering it to the most critical trade we are sure we have something that will please everyone using a spray hose. We have this hose on reels and can supply any length wanted. In ordering for power use, kindly so state so that it can be made up with long tail couplings. Price per foot, 1/2 inch, 13 cts. Couplings extra.

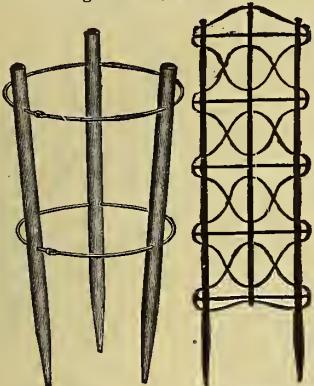


WIRE TREE GUARD (92). Made of extra heavy wire. Price, 1.00 each



(92)

THE ECLIPSE HOSE REEL (91). A handy and well-made Hose Reel, mounted on wheels, can be easily moved from one place to another. Hose should always be wound on a reel as it prevents it from rotting. Price, 75 cts.



(93)

TOMATO SUPPORT

34 in. high, 20 in. in diameter at the top. Price per doz. \$1.25.

VERANDA TRELLIS (93)

High Wide Each Doz.

5 ft. 18 in. \$0.85 \$9.00

6 ft. 18 in. 1.00 11.00

7 ft. 18 in. 1.15 13.00

8 ft. 18 in. 1.35 15.00

9 ft. 20 in. 1.60 18.00

10 ft. 20 in. 1.85 21.00

11 ft. 20 in. 2.15 25.00

12 ft. 20 in. 2.50 28.00

PLANT STICKS (94). For pot or garden use. Square, painted green.

Each 100

1 1/2-ft. sticks \$.02 \$1.00

2-ft. sticks02 1.50

2 1/2-ft. sticks03 2.00

3-ft. sticks05 4.00

3 1/2-ft. sticks06 4.50

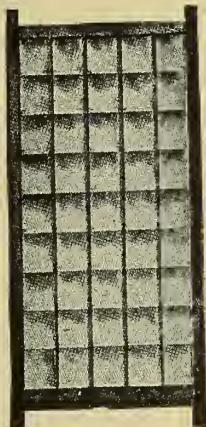
4-ft. sticks07 5.50

5-ft. sticks08 7.50

6-ft. sticks10 9.00

NURSERYMEN'S STAKES.

16 x 2 in. Extra quality. No. paint 4 cts. each; \$2.50 per 100.



HOT BED SASH. (95B) 3 x 6 x 1 3/4", with sides projecting, unglazed, \$1.85 each. Lot of 25, \$1.60 glazed with 6" x 8" double thick glass, \$3.00 each, in lots of 5, \$2.80 each, in lots of 25 or over, \$2.75 each.

**TREE LABELS.**

2 1/2"	Iron wire painted.	\$ 100
2 1/2"	Copper wire painted.	.90
3 1/2"	Iron wire.	.80
3 1/2"	Copper wire.	1.00

POT LABELS.

4"	Unpainted.	\$.50
4 1/2"	Unpainted.	.60
5"	Unpainted.	.70
6"	Unpainted.	.90
4"	Painted.	.70
4 1/2"	Painted.	.80
5"	Painted.	.95
6"	Painted.	1.20

GARDEN LABELS.

8"	Unpainted.	\$ 3.00
10"	Unpainted.	3.90
12"	Unpainted.	5.00
8"	Painted.	3.70
10"	Painted.	4.80
12"	Painted.	6.00

COLUMBIA REVOLVING**LAWN****SPRINKLER****(95D)**

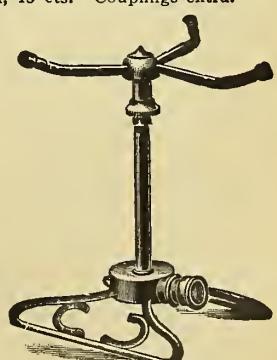
Price, \$1.25.

Niagara Round

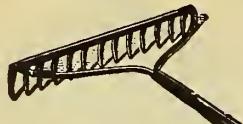
Lawn Sprinkler

Price - 75 cts.

5 lb.



COLUMBIA



CURVED TOOTH STEEL RAKE (96) 12 teeth, 55 cts. each; 14 teeth, 60 cts. each; 16 teeth 65 cts each.

WOOD LAWN RAKES



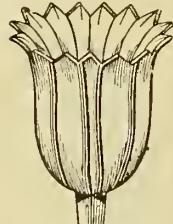
QUEEN REVERSIBLE WIRE LAWN RAKE. (97) 40 cts. each. 3 lb. No handle by parcel post.



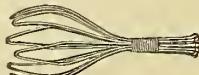
TURF EDGER. (99.) 50 cts. each. 3 lb.



STEEL BLADE TREE SCRAPER. (98) 35 cts. each. 2 lbs.



(102A)

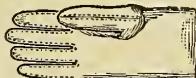


(103)

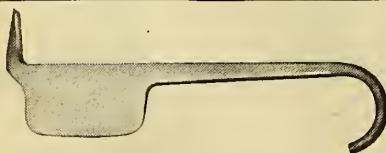
O. P. GARDEN MARKER. (102.) Each, 5 cts.; doz. 55 cts. 3 lb.

CEMETERY VASE. (102A). Green and gold. Small, 25 cts. each; medium, 30 cts. each; large, 35 cts. each. 4 lb.

PEERLESS FRUIT-PICKERS. (103) Price 25 cts. 1 lb.



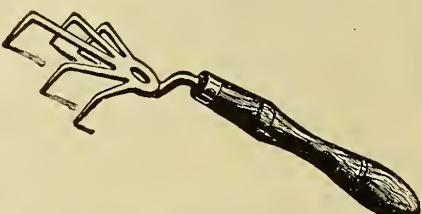
COTTON GLOVES (100.) 10 and 15 cts. per pair.



GRAFTING CHISEL. (119) All Steel, 6 in 50 cts., 8 in. 85 cts.



STEEL GARDEN TROWEL. (104) Best one ever made. Price, 50 cts.



SECOR WEEDERS (105.) 10 cts. each, \$1.00 doz.



SHOVEL HANDLES (106.) 25 cts. each.

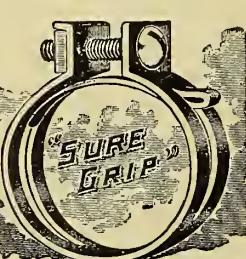
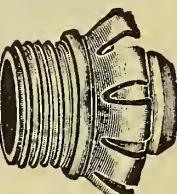


COOPER HOSE MENDER. (108) (All brass.) $\frac{1}{2}$ in. and $\frac{3}{4}$ in. 8 cts. each; 75 cts. doz. $\frac{1}{2}$ and $\frac{3}{4}$ inch.

BRASS HOSE WIRE. (109) $\frac{1}{4}$ inch. 10 cts. doz.



PERFECT ALL BRASS CLINCHING HOSE COUPLING (110.) 25 cts. set. Menders, 10 cts. each. Put it on hose and hammer it in place.



SURE GRIP HOSE BAND. (107.) $\frac{1}{2}$ in. and $\frac{3}{4}$ in. 3 cts. each; 2 for 5 cts.



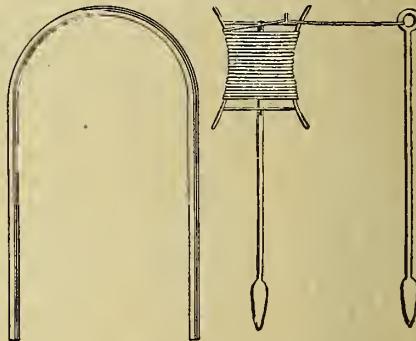
WIRE WICKET (95). Painted Green. Heavy. 55 cts. per doz.; light 35 cts. per doz.

GARDEN LINE REELS. (95A). Two sizes, holds 200 feet of line, 50 cts. Wt. 3 lb., holds 300 feet of line, 90 cts. Garden line, 100 feet, 60 cts

IRON DIBBER (115.) Price, 25 cts. 2 lb.



GARDEN TROWEL. (116) Price, 10 cts.



(95)

(95A)



CLEVELAND LAWN WEEDER. (229.) The curved edge of the blade enters and loosens the soil, pressure on the lever then causes the toothed jaw to grasp the plant, and a slight pull suffices to dislodge it without disturbing the surrounding soil. Price, \$75. 2 lbs.

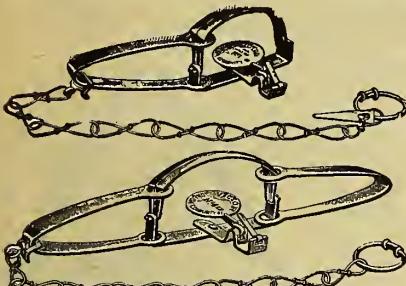
"Goshen" Round End Stock Watering and Storage Tanks (120)



List No.	Width feet	Height feet	Length feet	Cap. Gals.	Weight Pounds	List Price
101...2	.2	.2	4	91	74	\$ 9.25
102...2	.2	.2	5	117	88	10.75
103...2	.2	.2	6	144	102	11.75
104...2	.2	.2	7	170	121	13.50
105...2	.2	.2	8	197	135	14.50
106...2	.2	.2	10	250	166	18.50
107...2	.2	.2	2½	246	151	15.50
L...2½	.2	.2	5	145	93	12.25
M...2½	.2	.2	6	178	110	13.35

We can furnish any size.

NEWHOUSE DOUBLE JAW TRAP. Double jaws prevent gnawing out. If you catch him you are sure to hold him. Best steel chain. Price, No. 91, 35 cts. each, \$3.50 per doz.; No. 91½, 50 cts. each, \$5.75 per doz.



VICTOR TRAP. (121.) This is similar to the above, but has single jaws and is less expensive. Each trap has steel wire chain. 1 lb. each.

	Each	Doz.
No. 0...	\$0.12	\$1.30
No. 1...	.15	1.65
No. 1½...	.25	2.50
No. 2...	.30	3.30

JUMP TRAP. (122.) These traps are light in weight and easy to carry around. They lie flat and are easily secreted.

	Each	Doz.
No. 0...	\$0.15	\$1.65
No. 1...	.20	2.00
No. 1½...	.25	2.75
No. 2...	.35	3.75

OUT OF SIGHT MOUSE AND RAT TRAP. (Not shown.) Best Rat-trap made. For rats, 15 cts.; for mice, 10 cts. Postpaid.



Hog Troughs (127)

Cast iron hog troughs. Nearly the price of wood troughs and will never wear out. 4 ft., \$2.10 each; 5 ft., \$2.50 each.

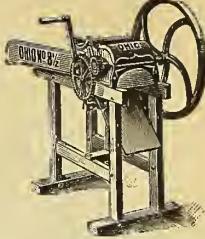
Owing to the unsettled conditions of the market, due to the war, all prices quoted in this catalogue are subject to change without notice.

Ohio Hand-Power Cutters Nos. 8½ and 10½ (123)

The best Hand Cutter made.

Discount for Cash, 20%.

No.	Knives	Knives	Length of cut	Price
8½...	8½...	2...	1¼, ¾, ¾ in.	\$20.00
10½...	10½...	2...	1¼, ¾, ¾ in.	25.00



Ohio Hand or Power Cutter No. 9 (NOT SHOWN)

Price, No. 9, with safety fly-wheel and pulley, two knives, \$35. No. 9 with safety fly-wheel and pulley, four knives, \$40. When furnished with extended knife shaft to place fly-wheel or pulley on either side, extra, \$2.

J. I. C. Stable Pails

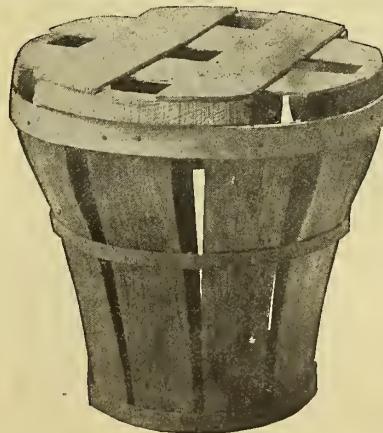
The best stable pail on the market. Made of oak with iron strap running down the side and heavy iron bail.

Price 60 cents



3 Hoop Iron Army Pail	...30 cts.
3 " Galv. "	" ...35 "
No. 60. 10 qt. light galvanized pails	....25 "
No. 60. 12 qt. light galvanized pails	....30 "
No. 60. 14 qt. light galvanized pails	....35 "
No. 850. 14 qt. heavy galvanized pail	....50 "

BERRY BASKETS. (125.) All white, \$4 per 1,000; 10,000 lots, 25 cts. less per 1,000. Close corner (for blueberries) \$4.50 per 1,000; oval pints, \$4.00 per 1,000; pansy baskets, \$13 per 1,000.



Peach Baskets

We have secured this year the best peach basket that we have ever offered to our customers. Each stave is secured to the hoops by six double pointed staples which makes the basket much more rigid. Price per thousand, \$37.50; per 100, \$4.00.

Oxford Picking Baskets

Oxford picking baskets are made strong and serviceable and are smooth on the inside to protect the fruit from bruising.

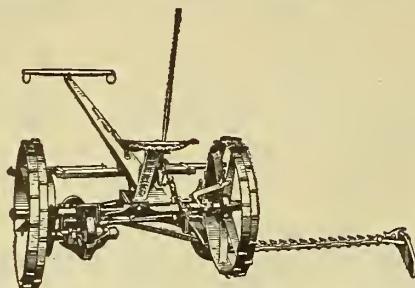
Price, peck per doz., \$3.00; each, 30 cts.

Price, ½ bush. per doz., \$3.50; each, 35 cts.

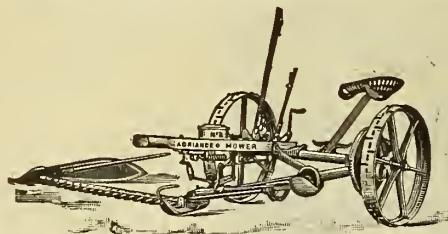
Hand-Made Baskets for all Farm Purposes (126)

Larger sizes made of hickory. Peck and half bushel made of ash and hickory.

4 bush. strapped	\$3.00	1 bush. strapped	\$.75
3 " " "	2.60	1 " plain	.65
2 " " "	1.50	½ " picking	.45
1½ " " "	1.25	¼ " " "	.35

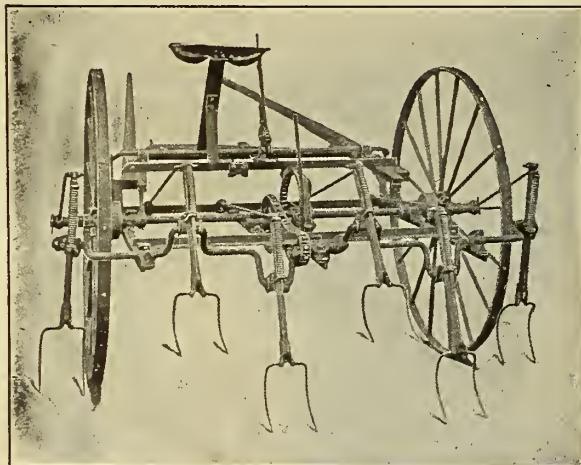
Deering Ideal Mower (128)

This machine runs on ball and roller bearings and is without doubt the lightest and stillest running machine ever made. Combines the three necessary features; good capacity, durability and absence of side draft. Frame is cast in one piece and gears so placed that the entire mechanism is well balanced. The best mower on the market. We will gladly mail catalogue describing it fully. Price 4 feet (for one horse), \$40; 4½ feet (two horses), \$46. 5 ft. (two horses), \$46. 6 feet (two horses), \$49. Discount for cash, 5%.

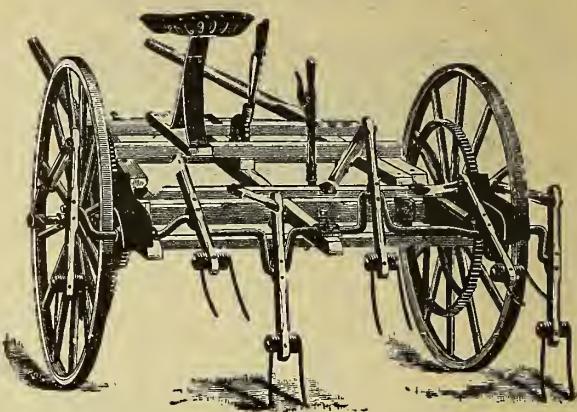
Adriance Buckeye Mower (129)

This Mower is direct draft. Its beam operating direct from the bottom, which evens the neck weight and side draft. The foot lever directly in front of the driver's foot is moved forward to raise the bar, making it very easy to operate. All levers on the Adriance are in reach of the driver and are easily operated. The seat is placed well back to prevent neck weight on the team. The cutter bar folds over the pole for transportation. Adriance Buckeye Mowers always give satisfaction. Ask for complete catalogue.

Price, 4 ft. (one horse), \$40. 4½ ft. (two horses), \$46. 5 ft. (two horses), \$46. Discount for cash, 5%.

The Monarch Steel Hay Tedder (130)

As shown is the latest thing out for a Chain-Driven Tedder. It is made of first-class steel, by skilled workmen. The wheels are extra heavy channel tire with staggered steel spokes. The frame is made of continuous steel angle bars in one solid piece, no spliced corners, no bolts or rivets to get loose. It has great strength at all points. The crank shaft is made of the very best tool steel with turned bearings, and broad journal boxes. The fork arms are made of boiler tube, and relief coil crucible steel spring is provided for each tooth. It has double seat support and separate levers for throwing in and out of gear, and for raising and lowering the teeth, both within easy reach of the driver. Has six forks and combined pole and shafts to be used with one or two horses. Price, \$32. Net cash price, \$30.

Bay State Wood Frame Hay Tedder (131)

This is the neatest and most substantially built wood frame hay tedder on the market. It has a solid steel axle and on stony ground we recommend this to any other tedder as we believe a wood frame and wood wheels, if properly housed, will last longer than steel. The fork arms are made of the best hard wood. It has two levers, one throwing in and out of gear and one for raising and lowering the fork for uneven ground. It has combined pole and shafts so it can be used for either one or two horses. It is the best wood-frame hay tedder on the market, made in one size only, six forks. Price \$30. Net cash price, \$28.

Mowing Machine Sections (132)

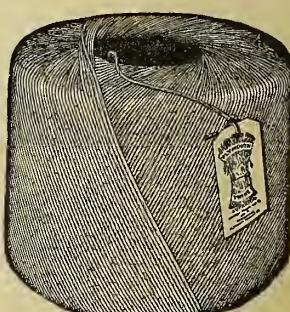
We are able to offer this year mowing machine sections put up in the latest improved styles, that is each box will contain 25 sections with 50 rivets, all that is necessary to rivet to the knife bar. All the sections are fully warranted and we have all sizes to fit the Deering, Buckeye, Champion, Wood, McCormick, or Osborne, machines. We think the trade will fully appreciate this new departure in having all the sections come complete with the rivets rather than make two separate purchases, and we are able to sell these sections at a price less than the common sections which we have sold heretofore. Give size when ordering or send old one for pattern. Price, \$1 per box of 25 sections, which includes rivets. Wt. 4 lb.

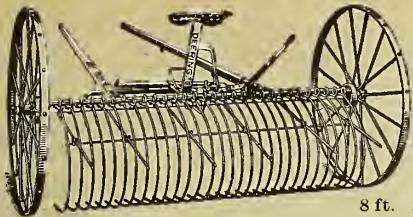
**Deering
Binder Twine
(134)**

Put up in 5-lb. balls. Price, 15 cts. per lb.; 5-lb. balls, 75 cts.; 50 lbs., bale, \$6.00.

**Deering
Machine Oil
(133)**

Made especially for mowing machines. Price, 1-qt. can, 25 cts.; 2-qt. can, 5 lb., 40 cts.; 4-qt. can, 9 lb., 75 cts.; 5 gal. cans \$1.75,



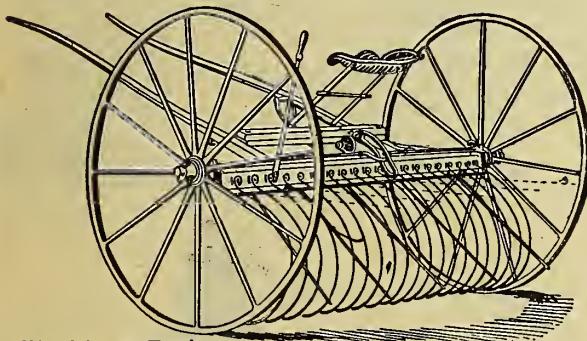
Deering Steel Frame Rake (135)

8 ft. 25 Teeth.

This rake is made to supply the demand for an all-steel rake. We believe this is the best of the entire lot. It is a horse dump raker. Strength and simplicity are two features in its construction. Price, \$22. Net cash price, \$21.

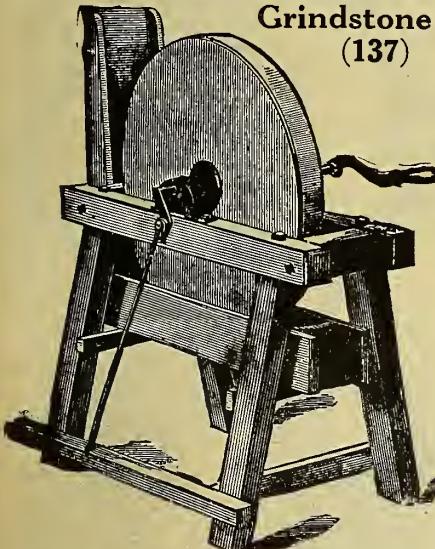
New Yorker Hay Rake (136)

(Champion Pattern.)



No. 2½. 8 ft. 26 Teeth.

This rake will rake green hay and aftermath better than any other rake. It has the sled runner tooth, is a self-dumping rake, and is easily operated. There are several imitations on the market. Be sure and get the genuine. List price, \$21. Net cash price, \$20.

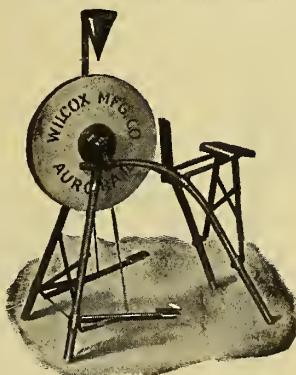
The Hecla Oak Frame Grindstone (137)

This stone we have made for us, and it is as good a stone as money will buy. It is furnished with best Nova Scotia stone, the frame is very strong and made of oak; has both crank and foot-treadle, with trough and protector.

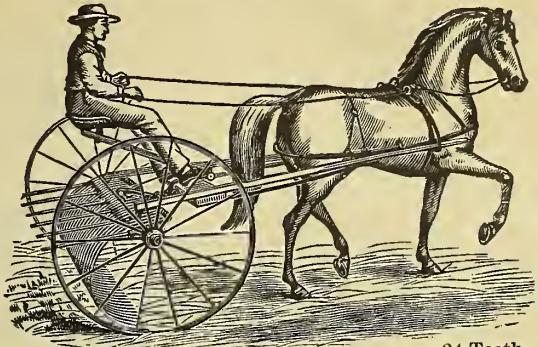
Size	Price	Net	Size	Price	Net
22 in....	\$8.50	\$7.75	28 in....	\$10.00	\$9.50
24 in....	9.00	8.50	30 in....	10.50	10.00
26 in....	9.50	9.00			

Wilcox-King Tubular Steel Frame Grindstone (140)

With foot-treadle and seat.



Adjustable seat, 4 to 5 inches vertically. Stone movable forward and back on frame. Frame being slightly flexible, it adjusts itself to uneven floor or surfaces. Rigid and easily set up. Bi-treadle, with power properly applied. Hinged connection with ball-bearings on crank. Ball-bearings in journals. Frame is narrow at top, making it convenient to apply power, and spread at base, giving greater rigidity. Crated complete, with face of stone protected. Price, No. 3, 60 lbs., \$5; No. 1, 100 lbs., \$5.50. Discount for cash, 5%.

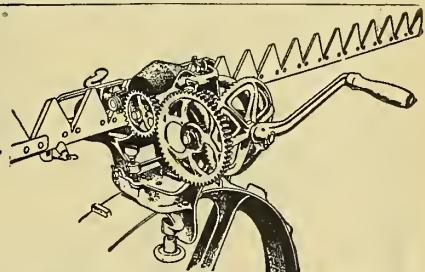
Yankee Hay Rake (138)

24 Teeth.

This is the old reliable Yankee, which needs no introduction. It is a very easy rake to operate, each tooth being independent; it will pass over large stones without breaking the teeth. It is so easy to operate that a child can handle it. List price, \$21. Net cash price, \$20.

Deering**Knife****Grinder**

(139)



It is poor economy to operate a mower with a dull knife, for it racks the machine and worries the horses. The Deering grinder is so arranged that the emery wheel sharpens two mower sections at once and preserves the correct bevel. For grinding out nicks the degree of pressure may be regulated by a simple adjustment which enables the operator to control the action of the wheel and the pressure. The knife is firmly held in place by clamps and may be easily removed from section to section of the wheel; grinds any make of knife. Price, \$4. Net cash price, \$3.75.

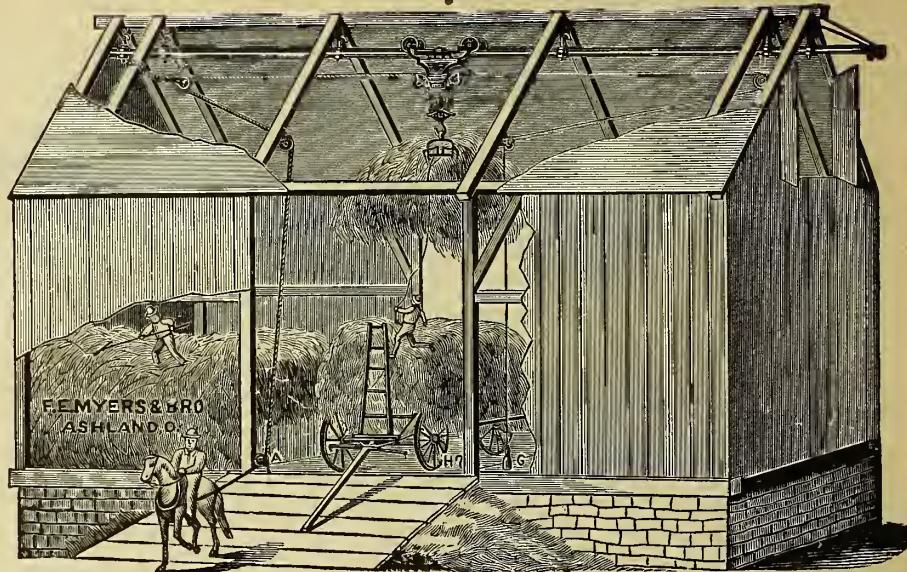
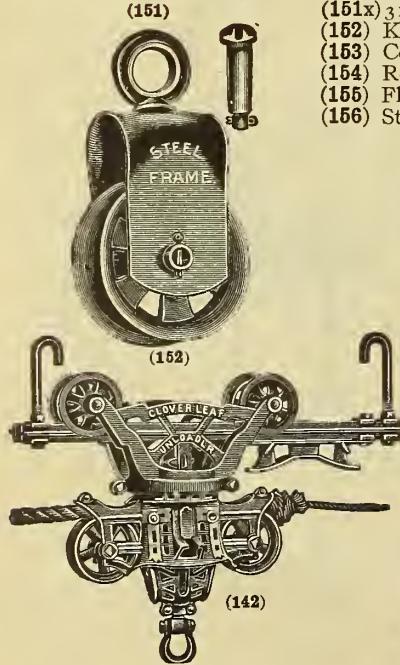
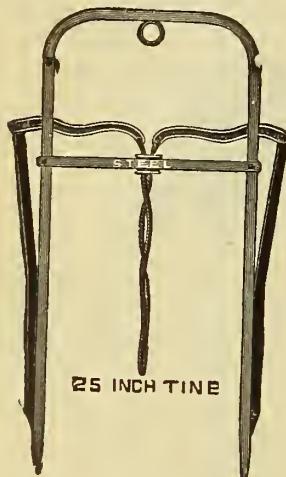
Wilcox Mounted Grindstone (141)

This is the best low-priced grindstone on the market. The stone is best Berea Grit (Ohio), the legs are iron, which will not rot if left out during haying; the wood side-pieces are painted bright vermilion. Runs on ball-bearings, and every stone warranted to run true. No. 1 stone weighs about 100 lbs., \$5; No. 2 stone weighs about 80 lbs., \$4.50; No. 3 stone weighs about 60 lbs., \$4. Discount for cash, 5%.

NO BARN IS COMPLETE WITHOUT ONE OF THESE RIGS

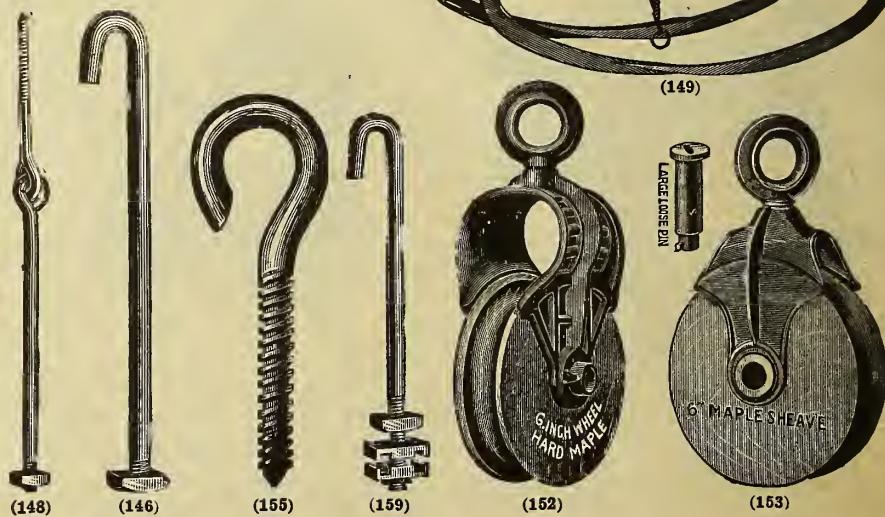
Reversible Steel Track Hay Carriers

Our carriers for rod, wood or steel track are the most durable and easiest rigs to operate of any on the market. Anyone with a hammer and wrench can rig his barn as well as an expert carpenter. We furnish everything necessary for rigging any style of barn. If you will send us the length and height of your barn and style of ridge pole, will name you price for complete job.



PRICES

(142) Reversible Carrier, each,.....	\$ 5.00
(143) One Way Carrier, each (not shown)	5.00
(144) Wood Track Carrier, each, (not shown)	5.00
(145) Steel Track, per foot (not shown)	.14
(146) Steel Hanger Hooks, per dozen....	1.25
(147) Malleable Iron Rafter Brackets, per doz. (not shown) .....	.75
(148) Jointed Hanger Hooks, per dozen..	1.50
(149) Four Tine Grapple Forks, each....	5.00
(150) Six Tine Grapple Forks, each.....	6.00
(151) 25" Double Harpoon Forks, each..	1.60
(151x) 31" Double Harpoon Fork	2.00
(152) Knot Passing Pulleys, each.....	.35
(153) Common Pulleys, each.....	.25
(154) Rope Hitch, each, (not shown)....	.25
(156) Floor Hooks, each.....	.10
(156) Steel Grapple, each (not shown)...	.85





Insurable Standard Cyphers Incubators and Brooders (157)

Cyphers Incubator Company is the first to manufacture incubators and brooders that meet the requirements of the associated fire insurance interests and is the first company to be granted labels by the Fire Underwriters, covering inspected and insurable incubators and brooders built in conformity with the specifications of their expert engineers. Labels have been issued to Cyphers Incubator Company for Incubators and Brooders.

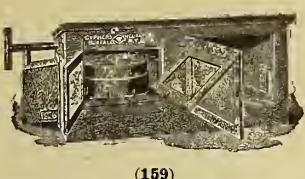
Cyphers Incubators are standard machines and the fire-proof lamp used, on both the incubators and brooders enables anyone to operate one of these machines without additional expense for insurance.

The electric machines are also very handy for those who are so situated that they have electricity, as it requires only a 16-candle power current to run them. They are absolutely safe and reliable and require no attention except turning the eggs once a day.

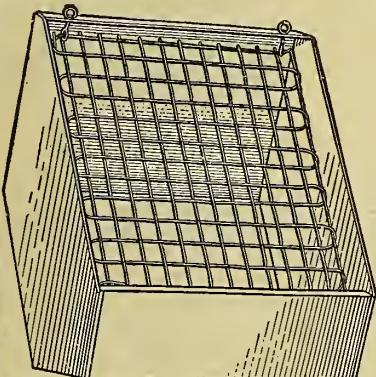
PRICE LIST

	Eggs
No. 0 Incubator, without nursery drawers.....	70 \$15.00
No. 1 Incubator, without nursery drawers.....	144 23.00
No. 2 Incubator, with nursery drawers.....	244 34.00
No. 3 Incubator, with nursery drawers.....	390 40.00
No. 1 Electrobator.....	60 16.00
No. 2 Electrobator.....	120 20.00
Electric Hover, without inclosure.....	10.00
Adaptable Hover.....	9.00
Style A Outdoor Brooder.....	14.50
Style B Outdoor Brooder (see illustration 159).....	18.50
Style C Outdoor Brooder.....	20.00
Style D Outdoor Brooder.....	13.50

Complete catalogue, giving description and valuable information in regard to this complete line, will be mailed free on application.



(158)



Cyphers New Portable Hover (158)

(SELF-REGULATING, SELF-VENTILATING.)

The self-regulating feature used in these Hovers is the same high grade automatic thermostat such as the Cyphers people use on their regular line of brooders and incubators, which have given world-wide satisfaction.

It is absolutely self-ventilating, there being no "dead air space" underneath the brooding hover, which proves so disastrous in other brooders.

This Hover is for indoor use and has a capacity of seventy-five newly hatched chicks or of fifty chicks ten days to two weeks old.

It will operate perfectly in any temperature above the freezing point. There is absolutely nothing about this Hover to take fire or burn up, as it is made entirely of metal, except the brooder curtain which is of woolen felt and is chemically fire proofed. The lamp is readily removed for cleaning, etc., and the whole Hover can be moved about easily and picked up complete, Price \$9.00.

Boston Dry Food Hopper (160)

This Feeder should be hung about four inches from the floor. It is made of galvanized iron and it is almost indestructible. The wire grid follows the dry mash and prevents it from wasting. You can always tell whether the feeder is full or not. This is the best dry mash feeder made. Price, \$1.00 each or \$11.50 per dozen. 5 lb. each.

International Brooder (161)

The first start toward success in Poultry Raising is to get good, strong rugged chicks. The International Sanitary Hover is so constructed that the heat is as warm at the curtain as in the center, and there is no chance for the deadly gases to get into the brooder. It can be used in any place where there is shelter from the wind, rain, and snow. It is especially adapted for colony houses and can be used in any old dry-goods box in the barn or stable.

You do not have to kneel down to tend it. The Hover is lifted up by a handle and is easily attended to.

Ventilation.—Fresh air is supplied to the lamp through a short tube under the handle. The foul air goes up through the tall draft pipe. The price is \$9.50.

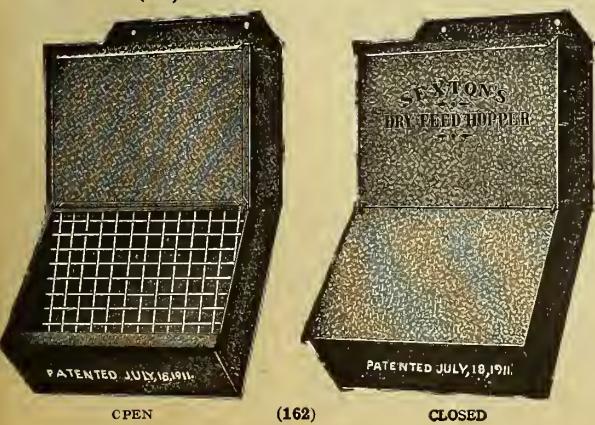
Sexton's Dry Feed Hopper (162)

Patented July 18, 1911.

Pronounced to be the best Hopper offered. Simple in construction, easily operated and absolutely "Rat" and "Mouse" Proof.

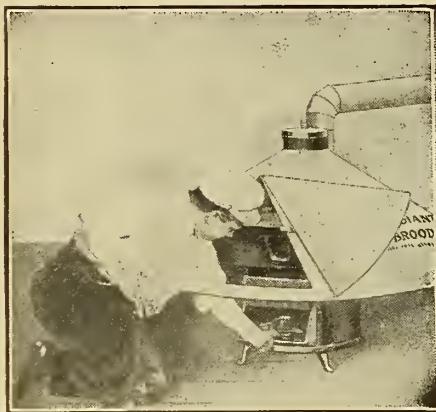
The lower cover is so arranged that it is held up by locking the top cover of Hopper over same and by raising the top cover the lower cover will fall in place.

This Hopper is arranged to hang on the wall the desired distance from floor and never need be removed from the wall to be refilled. It is impossible to waste any feed as the pan at the bottom takes any feed that may be picked out and the last crumb can be used, therefore saving any waste. Price \$1.00 each. Wt. 5 lb. each. Per doz. \$11.50.



THE NEWTOWN COLONY BROODER

As the Great Time, Labor and Chick Saver



(163)

The Newtown Colony Brooder has established itself on thousands of poultry plants as an important factor in the successful rearing of chicks.

It has been thoroughly tested by prominent poultrymen, and proved to be the most efficient and economical brooder they have ever used.

Why the Simplest, Safest, and Most Economical

Instead of spending time attending ten or more small lamp brooders, the poultry-raiser now keeps 500 or 1200 birds around one Newtown Colony Brooder that burns coal, and automatically regulates its own temperature.

Instead of filling oil lamps, the poultryman now pours from two to four buckets of coal into the magazine every 24 to 48 hours, and shakes down the ashes once a day.

Instead of turning the wicks high or low by hand to give the birds more or less heat as the weather changes, you simply adjust the Regulator of the Newtown Colony Brooder at the start of brooding, and do not touch that Regulator again during the season.

Instead of increasing the cost of insurance on his buildings taking chances of destruction of his plant, as a result of burning oil, coal-burning Newtown Colony Brooders are now employed which are just as safe as the kitchen range.

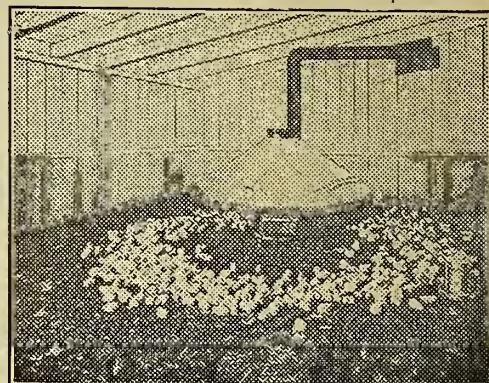
Instead of compelling the chicks to inhale fume-laden air—which is always very noticeable to the person who enters a room in which oil brooders are in operation—the birds now breathe pure air warmed by the coal-burning Newtown.

Eight cents a day buys all the coal necessary for the Newtown in normal weather—as compared with 35 cents a day for the oil consumed by other brooders to raise the same number of chicks.

These brooders are made in three sizes as follows:

No. 10 For 300 chicks	No. 11 For 500 chicks	No. 12 For 1200 chicks
Price \$18.00	\$25.00	\$35.00

(163A)



Bradley's Poultry Houses

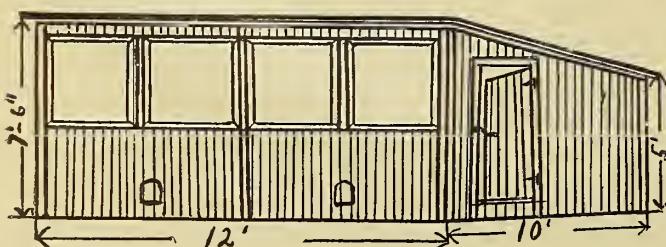
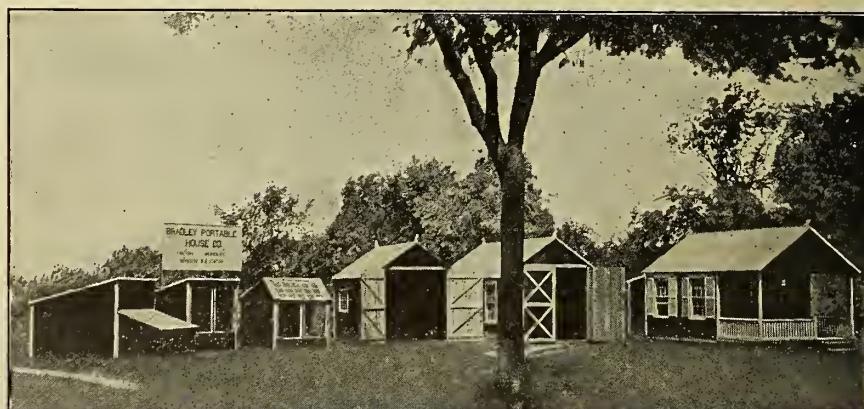
Made in all sizes and styles to suit all conditions and ideas. All Houses are covered with 2 ply roofing. Following is a partial list of sizes and prices. These prices are strictly net cash F. O. B. Randolph.

6 ft. x 8 ft. Colony House.....	\$15.00
6 ft. x 8 ft. " " with dropping boards, 2 roosts, 4 nests	1.50 extra
10 ft. x 12 ft. Sectional house, complete with 4 roosts, dropping boards 6 nests.....	35.00
8 ft. x 8 ft. Economy house.....	16.50
4 nests dropping board, 2 roosts	2.00 extra
6 ft. x 8 ft. Sunshine house, glass roof, 4 nests, dropping board, 2 roosts	16.50
House and yard for hen and chickens with wire covered run 38 in. x 24 in. x 16 in. high.....	1.50 extra
2.50	

Other styles and sizes at prices in proportion.

These houses cost less than the material can be purchased for at retail.

Send for complete circular giving description and prices.



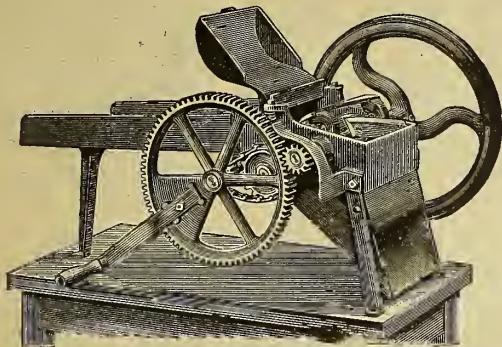
ROSSCO SLATE COVERED SHINGLES

Do not use common wood shingles when you can buy fire-proof slate covered shingles at the same price. Old dry wood shingles are the most dangerous things that you can have on your place. Sparks from fires and fireworks of any kind have destroyed thousands of buildings which would have been saved if they had been covered with fire-proof shingles. These shingles are made from similar materials to our Rossco Roofing, but are slate covered. They come in two colors, red and green. Using half and half you make a much better looking building, which lasts longer and is also fire-proof against sparks. Cheap enough for any barn and good enough for any house. Samples mailed on request. Price \$4.75 per thousand.

Note: One thousand will cover 100 square feet, laid 4" to the weather, the same as you would lay common wooden shingles.

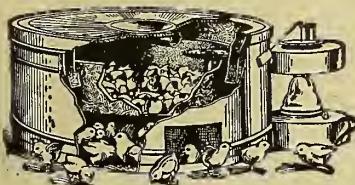


Silver's "New Model" Clover Cutter (168)



"NEW MODEL." Clover cutter has four all-steel knives mounted on two knife heads on a steel shaft. The steel knives can easily be removed for sharpening, and the cutter bar is adjustable and easily accessible, so that a perfect cutting edge can be assured at all times. The knives are 7 inches long. With four 7-inch knives; weight K. D. 60 lbs. List price, \$10. Discount for cash, \$1.

The Simplicity Combined Hatcher and Brooder (169)



Whether you are new or old at the business you will be delighted with the ease with which you can turn eggs into chickens with the Simplicity Hatcher. And after you have hatched the chickens it is not necessary to buy a brooder in order to raise them, as the hatcher does this also. With this combined little machine you can get rid of the troublesome method of taking care of the old.

Can be easily cleaned by taking off the cover rinsing or scalding it out with hot water, and leaving it open for the sun to get in, which is the greatest of all sterilizers.

The circular shape makes no cold corners for the chicks to crowd into. It is not necessary to have any applied moisture as the incubator takes care of this perfectly.

Complete outfit, fifty egg size Hatcher and Brooder will cost you \$8.50. Complete outfit, one hundred egg size Hatcher and Brooder will cost you \$12.00.

The Norwich Automatic Exerciser and Feeder (170)

MADE IN THREE SIZES.

The Norwich Automatic Exerciser and Feeder, as its name implies, is an ingenious automatic machine for feeding and exercising poultry, and has, by force of its own merits in the short years of its existence, established itself as the standard method of feeding in poultry culture.

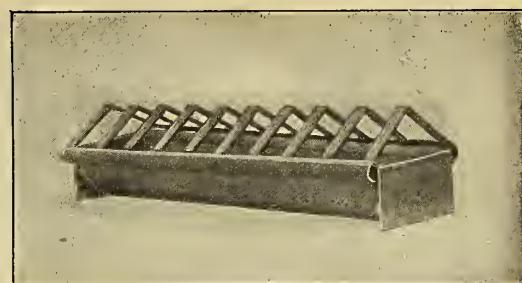
The machine consists of a Hopper of sufficient size to carry a week's supply of grain for flocks of corresponding numbers, and is fitted with an adjustable valve for regulating the feed. Working in conjunction with an Agitator Disc, the Feeder is operated by the birds rotating the Bait Bar, and the grain escaping from the Hopper rattles down the Deflector, is scattered on the floor or in the litter in a wide even circle, and the birds kept constantly at work and in motion while feeding.

PRICE LIST

Norwich Automatic Exerciser and Feeder

Actual Shipping Weight

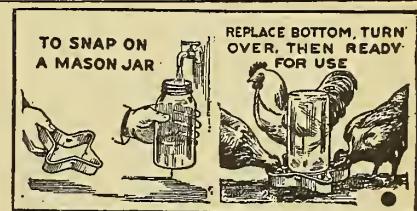
No. 1—8-Quart Hopper	13 lbs.	\$2.50
2—14 "	15 "	3.25
3—20 "	20 "	4.10



Chick Feed Troughs (171)

The only rounded chick feed troughs on the market. No trouble to clean them. The grate slides easily on and off—a feature not found in any other chick troughs. The grate also serves as a handle, and is so slanted that the chicks cannot roost on it. Two sizes—10 inch and 20-inch.

10-inch, 30 cts. 20-inch, 50 cts. 2 lbs.



172

No. 11 Feeder (173)

1½ quart, 35 cts.;
3-quart, 50 cts.
2¾ lbs.

Star Chicken Fountain

Something entirely new. Made of galvanized steel, will not rust, fastens to the top of any pint, quart or 2 quart Mason jar. Screws to the top of the jar by corrugations pressed in the metal. No electric welded fastening to come off same as in the old style fountains. Every chicken raiser should have a dozen. Price 15 cts. each, dozen \$1.50.

DAVIS' FOOD AND WATER FOUNTAIN. (Not shown.) Can be used for either water, feed, grit, shells or bone. It is the only fountain adapted to use any glass bottle. Price, 25 cts., with glass bottle, 30 cts.



The Standard Coop (175)

Made entirely of metal. Rat and vermin proof. Absolutely safe and sanitary. One great value of the round coop is that there are no corners for the accumulation of dirt or the smothering of little chicks. Everything made of heavy galvanized iron, the roof is corrugated, the bottom raised from the ground. The best and only practical coop made, either for a setting hen or for old hens and chicks after they are hatched.

Think of the advantages of the galvanized coop as compared with an old box or barrel through which rats may enter at their will. Net cash price, \$2.00.

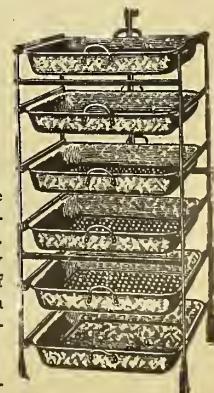
National Oat Sprouter

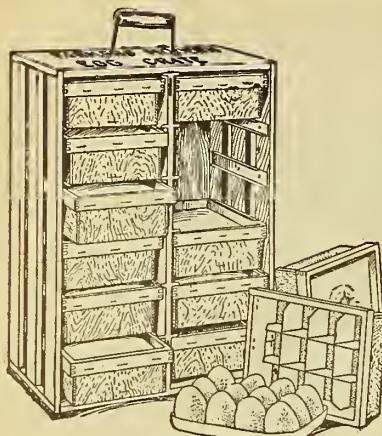
(176)

It pays to feed green stuff in winter

With this mechanical device green feed can be given to the poultry at all times. The tray contains five sprouting pans with a bottom drip pan. By feeding one pan full of sprouted oats each day and replacing this same pan with a fresh supply of oats, the new shoots from one to four inches high can be supplied to the fowls daily, giving a never-failing supply of green feed.

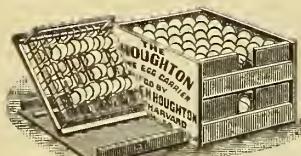
Indorsed by all the poultry raisers and egg producers. Price, \$5.00.



**THE FARMER'S MODERN EGG-CRATE (187)**

Consists of a substantial carrying crate to carry 8, 12 and 18 one-dozen-egg carriers. The carrying crates are very substantially constructed of white wood. The individual carriers are made of strong, tough jute boards with separate compartments for each egg, thus eliminating all chance of breakage. Can be used either as an egg-turner or as a carrier.

8-doz. carrier.....	\$1.00
12-doz. carrier.....	1.25
18-doz. carrier.....	2.00

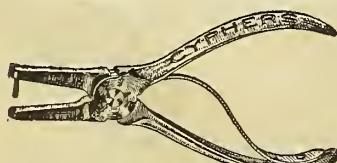
**WIRE EGG CARRIER (188)**

The latest and best invention for handling eggs. Capacity Each Capacity Each
6 doz..... \$1.25 25 doz..... \$2.50
9 doz..... 1.50 30 doz..... 2.75
15 doz..... 1.80 36 doz..... 3.00
20 doz..... 2.25

**PILLING'S CAPONIZING TOOLS (189)**

Poultrymen can double their profits by Caponizing their chicks. The operation is very simple—the instruction so full and explicit that anyone will be able to perform the operation. Capons are worth \$1.00 to \$1.50 more than cocks not Caponized. They are very much quieter in disposition.

Complete with instructions, \$2.50. In Velvet-lined case as per Engraving, \$2.75. We send book, "Complete Guide for Caponizing," with every set.

**CYPHER'S PERFECT MARKER (190)**

Made especially for marking chicks; makes a good clean cut and does not mutilate the web. Price, 50 cts. each. Weight 1 lb.

**INCUBATOR AND BROODER THERMOMETERS (191)**

Every one warranted accurate, and will be mailed postpaid at prices named:

A, Brooder Thermometer	\$.30	E, Cypher Incubator	\$.50
B, Prairie State Incubator	.50	F, Regular Incubator	.50
C, Brooder Thermometer	.30	G, Cornell Incubator	.50
D, Ertel Incubator	.50		

**PILLING'S IMPROVED INSTRUMENT FOR OPENING OBSTRUCTED TEATS (192)**

The above instrument for opening obstructed (cows') teats. Any person of average intelligence can use it with perfect safety. We send it securely packed in neat box, with full instructions, postpaid, on receipt of price, 75 cents.

**STRicture INSTRUMENTS (193)**

For cutting strictures in cows' teats. Pillings's three-ring Stricture Cutter. Price, \$3.00.

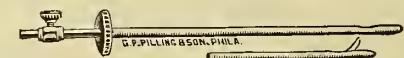
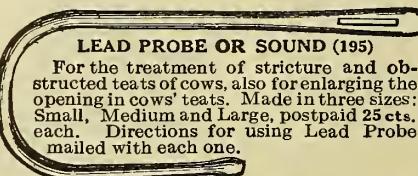
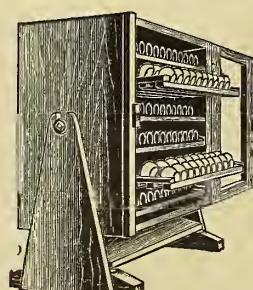
**PILLING'S PLAIN TEAT SLITTER (194)**

Illustration shows instrument both open for cutting and closed for inserting. Plated, \$1.50.

**LEAD PROBE OR SOUND (195)**

For the treatment of stricture and obstructed teats of cows, also enlarging the opening in cows' teats. Made in three sizes: Small, Medium and Large, postpaid 25 cts. each. Directions for using Lead Probe mailed with each one.

Celluloid Colored Bands
Easily adjusted and readily distinguished on account of their color. Price doz. 12 cts., 100, 65 cts. Postpaid.
Tag your poultry and then be able to keep a correct record of breed and age.

**HOUGHTON'S WIRE EGG TURNER (196)**

This turner is made for the use of all Poultry Breeders, large and small, to hold and turn eggs which are to be used for hatching. They are just the thing to hold and turn eggs which are kept in storage for higher prices. If turned every day or two they will keep fresh for weeks.

1008 Egg Size, \$8.50. 504 Egg Size, \$5.75.
336 Egg Size, \$.45.

PHILADELPHIA POULTRY MARKER (197)

(197)

Do you keep a record of chickens? The different breeds, hatches, etc., should be kept. There is no better or quicker way than by this marker, as over 200 different marks can be made by punching web between toes. They are well made with steel spring and cutter, nicely nickel plated. Made in two sizes. Sent postpaid on receipt of price, 25 cts. each.

**ALUMINUM TAG BANDS (198)**

Made of one piece; two sizes; will fit any fowl; impossible to lose. In ordering give breed. Price, doz. 15 cts., 100, 75 cts.

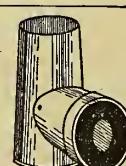
OPEN PIGEON BANDS (199)

Made from aluminum with rounded edges. Can be opened or closed sufficiently to fit different sizes of pigeons. We furnish them numbered from 1 to 100.

Price, doz. 15 cts., 100, 90 cts. Postpaid.

**FRENCH POULTRY KILLING KNIFE (200)**

Every poultry raiser should have one of our Killing Knives. They are made of finely tempered steel, with nickelized handle; will last a life time. It will be one of the best investments you ever made. Sent postpaid on receipt of 50 cts.

**X-RAY EGG TESTER (201)**

The most practical egg-tester made, and is equal to any high-priced appliance. Price, 25 cts. Weight 4 oz.

**THE COOLIDGE ROOST BRACKET (202)**

This is a simple but effective device for preventing lice from getting on the roost. The cut explains how it is done. Price, 15 cts. each.

For Parcel Post Rates see inside of front cover

ROSSCO ROOFING

FIRE RETARDENT

ECONOMICAL

DURABLE

Keeps your stock warm and dry.

Although one of the cheapest in price this is guaranteed superior to any similar roofing on the market today.

It is made up especially for us under our name. We guarantee the 1 ply 5 years, 2 ply 7 years, 3 ply 10 years.

Buildings covered with this roofing have withstood all damage from fire while unprotected buildings at a much greater distance have been burned. Although not absolutely fire-proof this roofing will protect your buildings and yet is not expensive to use.

This makes a most satisfactory covering for stables, poultry houses and similar constructed outbuildings as a siding as well as a roofing and keeps out wind and cold.

PRICE.

1 Ply, \$1.35

2 Ply, \$1.95

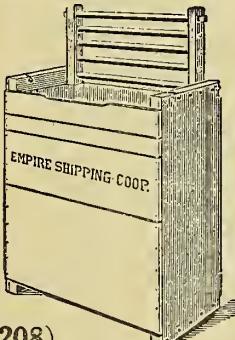
3 Ply, \$2.40

Rossco Slate Covered Shingles

Rossco slate covered shingles are made from the same high quality of paper and are covered by a layer of fine slate chips which are rolled into the surface. These shingles come in red and green slate, and when laid, make an artistic, fire-proof roof, more durable than wood shingles, no more expensive at the start and much more economical in the long run. Being a protection against fire as well as artistic in appearance, their value as a roofing is being realized more every day. Many cities are requiring fire-proof roofs. Why not adopt this policy yourself when the cost is no greater than the old method of using wood shingles?

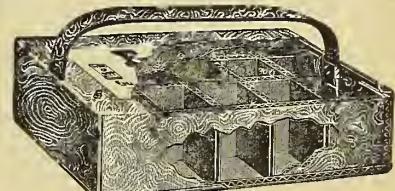
Rossco Roofing is put up in rolls of 108 sq. ft.; but no charge is made for the extra 8 ft. The 108 sq. ft. size is what is known as one "square" or half roll or 100 ft. when laid. Inside of each roll is packed cement and nails for laying.

Rossco Slate covered shingles are cut shingle size and are packed 250 ft. in a box. Laid 4 in. to the weather 4 boxes slate 8 x 12 in. shingles will cover one "square" same as 4 bundles of wood shingles. Price \$4.25 per square.



(208)

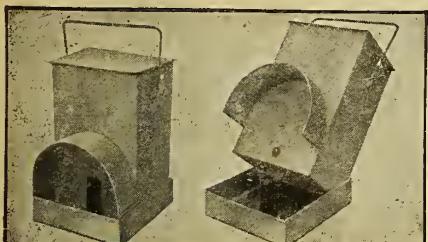
EMPIRE SHIPPING COOP. (208). The Empire coop for shipping exhibition birds is without doubt the best one on the market; the lid is locked by simply turning the rod one quarter round and no key is required. These coops can be shipped knocked down if desired. Price, single coop, 12 x 22 x 25, 85 cts.; trio coop, 18 x 22 x 25, \$1.10. Pen size 24 x 22 x 25, \$1.25 each.



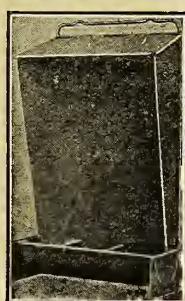
ERIE EGG BOX. (209.) The best carrier for shipping setting eggs. Price, No. 1, for 1 setting, \$1.35 per doz. No. 2, for 2 settings, \$2 per doz.

LITTLE CHICK BOXES. This is the latest up-to-date box for shipping little chicks. The box is made of corrugated board and is shipped flat, but it can be easily set up ready for use. The dead air cells protect the little chicks from cold. Made in 3 sizes, 25-, 50- and 100-chick size.

	Weight	Size	Doz. boxes
25 chicks	6½ lbs.	12 x 6 x 5	\$1.50
50 chicks	14 lbs.	12 x 12 x 5	2.00
100 chicks	22 lbs.	24 x 12 x 15	3.15



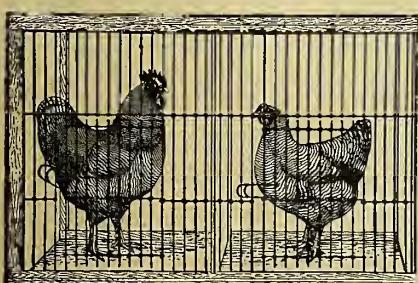
DROP-BOTTOM FOUNTS. (212). 28-gauge galvanized steel. Easiest thing in the world to open and clean. Clasp by which the bottom is fastened fits over the small hole under the hood, preventing slopping of water when the fount is fastened. Solid brass hinge rod—no rust. 1 gal. 60 cts. 2-gal. 80 cts. 4 lbs.

ROUND BOTTOM
GRIT AND SHELL
BOX (205)

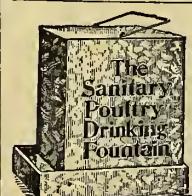
Round bottom—a feature absolutely new to grit and shell boxes. No clogging of grit and shell in the corners. Easily the most satisfactory grit and shell box ever placed on the market. An "A-1" winner for 50 cts. 3 lbs.



HEN FRIEND DRINKING FOUNTAIN (214). Made of the best quality of galvanized steel. Price, 2 qt. 35 cts., 1 lb.; 4-qt. 50 cts., 21bs.; 8-qt. 75 cts., 3 lbs.



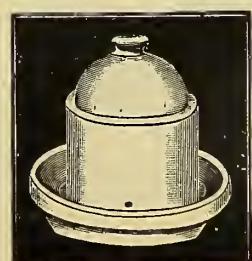
THE EMPIRE COOP. (207). Length of sections, 4 feet. Each compartment, 22 x 24 x 26 in. Price, \$1.35 per foot. We can furnish other sizes for pigeons and bantams.



SANITARY FOUNTAIN. (210.) 1-gal. galvanized iron, 50 cts., 2-gal. galvanized iron 85 cts., 3 lbs.



NO. 7 AUNTIE DRINKING FOUNTAIN. (204.) ½-gal. galvanized iron, 35 cts., 1-gal. galvanized iron 50 cts., 2 lbs.



E. H. M. FOUNTAIN. (215.) 1-qt. 25 cts., 2-qt. 30 cts., 4-qt. 35 cts., 8-qt. 50 cts. 7 lbs.

Wyandotte Feeds and Remedies

Beware of Imitations. Wyandotte Foods are being imitated by other Dealers.

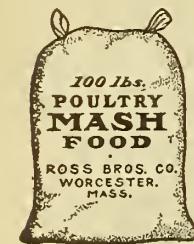
WYANDOTTE CHICK FOOD. Our Wyandotte Chick Food has saved the lives of millions of little chicks. This feed we placed on the market several years ago, in fact, we were the pioneers and the manufacturers of baby chick food. Our trade has constantly increased. Some of our largest and best poultry keepers tell us that they could not get along without Wyandotte. One of our most noted judges at our recent poultry show made the remark that he had tried a great many kinds but there was nothing equal to Wyandotte. Anyone can mix common grains together and give it a name, but to make a chick food that is put together in the right proportions requires skill and to know how to do it. Nearly every grain man has some brand of chick food, most of them are imitations of the Wyandotte, but very few of them are equal. Beware of chick food that is shipped in mixed cars of grain, for such feeds can only contain what are known as milled feeds. Millets, charcoal and other similar ingredients cannot be used for it is a violation of the Interstate Commerce Laws to ship such goods as milled feeds. We are not in the milling business and have no refuse to dispose of. We buy only the choicest cereals and imported bird millets that we can get. To these we add the very best oatmeal and fine cracked charcoal, all of which combined makes a food just fitted to produce strong and vigorous chicks. We put this in 100, 50, and 25 lb. bags. Be sure you see our trade mark of the old hen and chickens on the bag. If there is any doubt in your mind about this being Wyandotte send us a sample and we can tell you. You may save a few cents per 100 lbs. by buying something cheaper but it will be dearer in the end. Every chick you lose means 15 cts. to 25 cts. which is all you can save on 100 lbs. of feed. Better pay the price and get the best. Fowls may live on cheap grain but little chicks will not.

Price 25-lb. bag 75 cts., 50-lb. bag \$1.35, 100-lb. bag \$2.50. If your local dealer does not handle it either send to us direct or ask him to.



Simply because a feed looks good to the naked eye is no sign it will produce eggs.

Price, 100-lb. bag \$2.25. Will allow 5 cts. each for Scratch Food bags returned.



WYANDOTTE MASH FOOD. In extreme cold weather we recommend feeding a little hot mash just before night. At other times during the cold weather keep Wyandotte Mash Food before your fowls at all times. This can be best done by using the Sexton or Boston Dry Food Hopper. There is absolutely no waste in using one of these feeders and there is no waste material used in mixing Wyandotte Mash Food. This is sold under a guarantee to contain 16% protein, 3½% fat, 10% fibre. It contains those grains that are high in egg making qualities. You are safe in buying food with the name Wyandotte as we are the sole manufacturers.

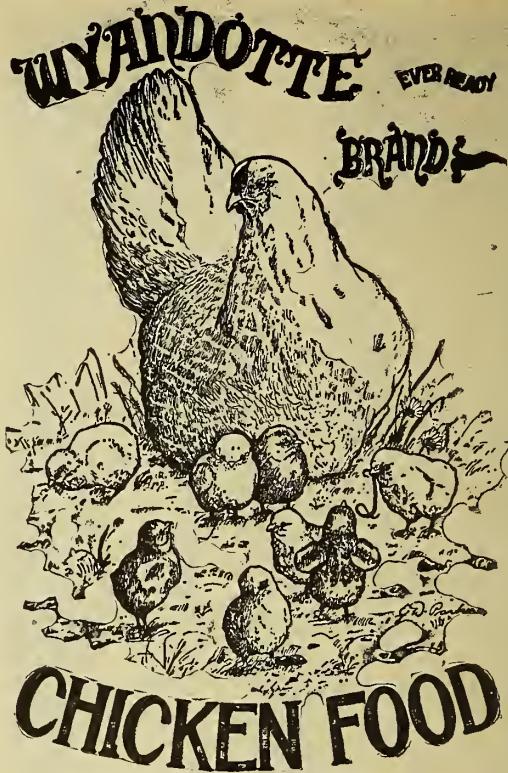
Price 100 lbs. \$2.10. Will allow 5 cts. each for Mash Food bags returned.

WYANDOTTE CHICK GROWER. This is designed to follow Wyandotte Chick Food. It contains practically the same properties only larger, and is just the food to feed chicks after they have reached the age where they do not need a little chick food. This will carry them through to maturity without any other grain. Skimmed milk (if it can be had) and beef scraps should also be fed, and plenty of fresh, clean water. 100 lbs. \$2.50, 500 lbs. \$11.25.

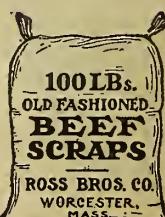
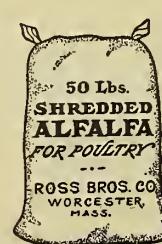
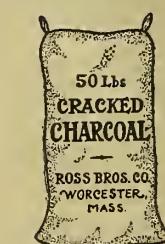
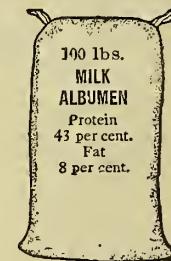
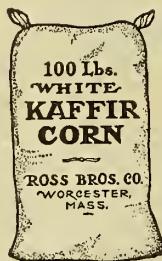
PRATT'S POULTRY AND CATTLE FOOD. We have sold Pratt's Food for several years and always found it reliable and can recommend it with confidence to our customers. To get the best results it should be fed regularly. It keeps the poultry in good condition, and is indispensable in the stable. It keeps cows and horses in the pink of condition. Poultry Food, small size, 25 cts. large size, 60 cts., 124b. bag \$1.25, 25-lb. bag, \$2.50.

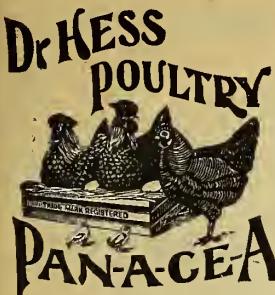


TRADE MARK REGISTERED



TRADE MARK REGISTERED.





DR. HESS' STOCK FOOD. Milk makes the money, but Dr. Hess' Stock food makes the milk. We guarantee Dr. Hess' Stock Food to increase the bone, muscle and milk producing value of your hay, grain, etc., sufficient to cover its cost many times over, besides keeping animals free from disease. 2½ lb.-pkg. 25 cts., 7-lb. pkg. 50 cts., 25-lb. pail \$1.60, 12-lb. sack 75 cts., 100-lb. sack, \$5.

DR. HESS' POULTRY PAN-A-CEA. 1½-lb. pkg. 25 cts., 5-lb. pkg. 60 cts., 12-lb. pkg. \$1.25, 25-lb. pail \$2.50.

KAFFIR CORN. A good food for hens, chickens or pigeons. It is about the size of a very small pea. 100 lbs. \$2.15.

MILK ALBUMEN. The food is in reality skimmed milk in dry form, without the sugar, and is even better than fresh skimmed milk. It will keep for any length of time without any odor. 100 lbs. \$3.00.

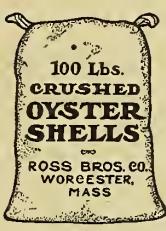
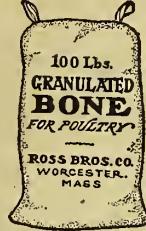
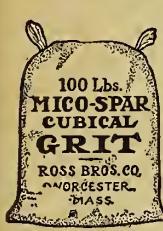
CANADA FIELD PEAS. For pigeons and parrots. 100 lbs. \$5.75.

PARROT FOOD. A mixture of whole seeds, especially designed for parrots. Lb. 10 cts., 3 lbs. 25 cts.

DRY GROUND FISH. For poultry. This is a great egg-producer, and takes the place of beef scraps, which are so hard to get at the present time. 100 lbs. \$2.75.

CRACKED CHARCOAL. Fine for small chicks. 8-lb. bag 25 cts., 60 lbs. \$1.00, 100 lbs. \$1.75. For poultry, same price.

OLD-FASHIONED BEEF SCRAPS. These scraps are ground fresh for us, and do not contain any oyster shell or tankage, but are good fresh bone and meat. 100 lbs. \$2.65



POULTRY MEAL. Is finely ground meat and blood, and is preferred by many to Beef Scraps. As it may be mixed with wet feed and prevents waste. 100 lbs. \$2.

SHREDDED ALFALFA. This is the latest and best food for all kinds of poultry. It is alfalfa, pure as can be had, finely ground, and should be mixed with other kinds of feed, and being very light, it makes a very nutritious food and is also an egg-producer. 100 lbs. \$1.75. 500 lbs. 1.60 per 100.

MICO-SPAR CUBICAL GRIT. Cracked in three sizes. No. 2 for poultry; No. 3 for pigeons; No. 4 for small chicks. 100 lbs. 75 cts.

GRANULATED BONE. Fresh cracked bone, without any meat, will keep for any length of time. Should always be kept in a box where the hens can get to it. 100 lbs. \$2.25.

CRUSHED OYSTER SHELLS. For poultry or chicks. 100 lbs. 75 cts.

KOW-KURE. Prevents and cures abortion and barrenness. Increases the flow of milk. It is for cows only. 50 cts., weight 2 lbs. \$1.00, weight 4 lbs.

COW RELIEF. Cures caked bags and sore teats. Should be in every stable. \$1.00.

CALF CORDIAL. Sure cure for scours and other similar complaints. 50 cts.

PIGEON FOOD. A mixture of Kaffir corn, wheat, etc. Lb. 10 cts., 100 lbs. \$2.75.

SHERIDAN'S CONDITION POWDERS. These goods are known in every town and need no recommendations from us. Large size, regular \$1.00 size, our price, 85 cts., small size, 25 cts.

GLASS NEST EGGS. 5 cts. each, 30 cts. per doz.

KNOX MEDICATED NEST EGG. Drives away lice and mites. 5 cts. each.

GREEN CUT BONE in season. We can furnish this in 50- and 100-lb. lots at \$3 per 100 lbs.

FINE CRACKED BONE. For small chicks; made from best selected white bones, finely cracked and screened. 8 lbs. 25 cts., 50 lbs. \$1.40, 100 lbs. \$2.50.

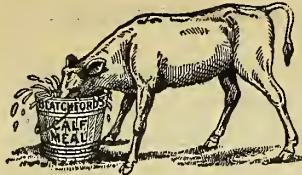
EDIBLE BONE MEAL. For cattle. 10 lbs. 30 cts., 100 lbs. \$2.50.

LEE'S EGG MAKER AND CHICK GROWER. A laying and growing food for poultry. 2½ lb. pkg. 25 cts., 5½ lb. pkg. 50 cts., 25 lb. pail \$2.

LEE'S GERMOZONE. For roup, cholera, canker and other diseases of poultry. 12 oz. bottle 50 cts.

LEE'S WHITE DIARRHOEA REMEDY. Price, 50 cts.

LEE'S INSECT DESTROYER. Destroys insects on poultry and stock. 1½ lb. pkg. 25 cts.



BLATCHFORD'S CALF MEAL

Perfect Milk Substitute. Will raise calves at from one-third to one-quarter the expense of feeding milk. Raises better calves and saves the milk. You can't afford not to use it. Used and endorsed by experimental stations and farmers all over the world. It is absolutely the only milk substitute that contains all the elements necessary for bodily growth in the correct proportions. 100 lbs.

makes 100 gallons of Perfect Milk Substitute. Price, per 100 lbs. \$3.50.

WYANDOTTE DAIRYMAN'S CLEANER. An absolute necessity in every dairy. A powder, easy to use, and recommended by everyone that ever tried it. The price for 5-lb. bag 25 cts., 80-lb. keg \$3.20, 280-lb. barrel \$8.40.

25 DOZEN EGGS MAY BE KEPT FROM ONE TO THREE YEARS AT ONE CENT PER DOZEN---BY USING WYANDOTTE EGG PRESERVATIVE

Enjoy summer prices on eggs in Winter. A harmless preparation in granulated form, easy to handle and economical to use. Will keep eggs 2 to 3 years in as good condition as when packed if directions are followed carefully. One quart will make four gallons of solution which is much superior to water glass (Silicate of Soda). Price 25 cts., shipping weight 2½ lbs.



	10 lbs.	100 lbs.
Imported Bird Millets.....	\$.30	\$ 2.50
Mixed American Millets.....	.25	2.00
Steel-Cut Oatmeal.....	.60	3.00
Canary Seed.....	.80	7.50
Hemp Seed.....	.75	6.50
Rape Seed.....	.75	6.00
Russian Sunflower Seed.....	1.00	8.00
Fine Cracked Corn.....	.25	2.00
Paddy or Unhulled Rice.....	.80	8.00

In 100-lb. lots, bags 20 cts extra.

CONKEY'S ROUP CURE. Cures roup in all its forms. It is simply put in drinking-water and the chicken takes its own medicine. 50 cts. and \$1.00.

CONKEY'S LICE POWDER. Kills Lice and other pests on poultry, horses and cattle. 50 cts. 1 lb.

THE EUREKA FLY-KILLER. Protects cattle and horses from fly pests and vermin. Sure preventive, perfectly harmless, easily applied and inexpensive. Eureka Fly-killer is a sure preventive that kills and drives away the worst of all pests—the Texas, buffalo and horn flies. It was born of a necessity; it meets an existing demand for an article of its kind, and that it meets it well and perfectly satisfactorily is attested by the numerous and grateful testimonials from farmers who have used it. Gallon, 75 cts. Weight 9 lbs.

LAMBERT'S DEATH TO LICE. As its name implies, it is sure death to lice on hens and chickens. It is harmless to human and animal life. Should be used on setting hens; it will not injure the eggs or harm the youngest chick. 15-oz. size 25 cts., 48-oz. size 50 cts., 100-oz size \$1.00.

LEE'S LICE KILLER. is a liquid preparation; comes in tin cans; highly recommended. Qt. 35 cts., weight 3 lbs.; 2 qts. 50 cts., weight 6 lbs.; 4 qts. \$1.00, weight 10 lbs.

DR. HESS' INSTANT LOUSE KILLER. Kills lice. Put up in round cans with perforated top ready for use in one- and three-pound packages. The large size is the cheaper. You get three pounds for 60 cts., and, with the handle, it is just as convenient as the smaller size. Large size, 60 cts., weight 5 lbs.; small size, 25 cts., weight 4½ lbs.

PRATT'S LOUSE KILLER. Put up in one-pound size. It kills the lice. 25 cts.

ROSS' ROUP CURE. A powder which is a positive cure for roup in its worst stages. Simply put a little in the drinking-water and the hens take their own medicine without any trouble whatever. We guarantee a cure or money refunded. Two sizes—small, 40 cts., large 75 cts., postpaid.

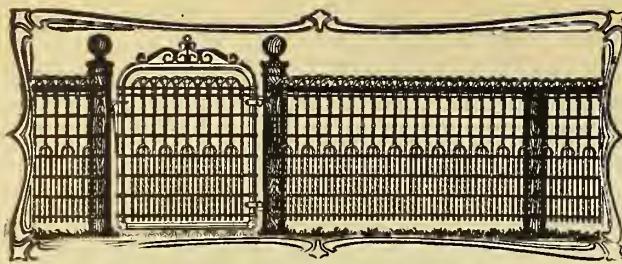
WYANDOTTE LICE POWDER. Kills lice on poultry and animals of all kinds. Lb. 25 cts., 3 lbs. 50 cts.

WYANDOTTE LIQUID LICE KILLER. Qt. 35 cts., weight 3 lbs.; 2 qts. 60 cts., weight 5 lbs.; gal. \$1.00, weight 10 lbs.



Dr. Daniels' Veterinary Medicines

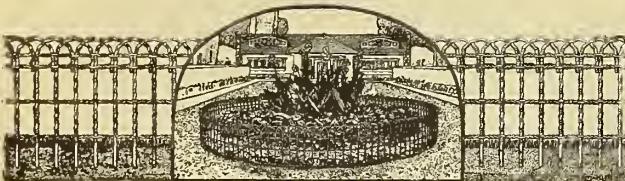
All reliable, and should be in every stable for cases of emergency.	Each
Colic Cure.....	\$ 1.00
Cough, Cold and Fever Drops.....	50 cts. and 1.00
Horse Renovator.....	.50
Wonder-Worker Liniment.....	.50
Worm Killer.....	.50
Absorbent Blister.....	50 cts. and 1.00
Oster-Coccus.....	25 cts. and .50
Liniment Powder.....	.50
Hoof-Grower and Softener.....	.50
Gall Cura.....	25 cts. and .50



**Cyclone Sanitary
Fencing
Style "F" Fabric
(177)**

Cyclone Fence is sanitary—lets in fresh air and sunshine, changing unhealthy, unsanitary, unattractive back yards into gardens, flower-beds, lawns and play grounds for children.

Style "F" is our most attractive and closest-mesh fence. Pickets are $1\frac{1}{2}$ inches apart at bottom.
Best heights are 36, 42 and 48 inches.
Price per lineal foot, 36-inch, 14 cts. Price per lineal foot, 42-inch, 16 cts. Price per lineal foot, 48-inch, 18 cts.

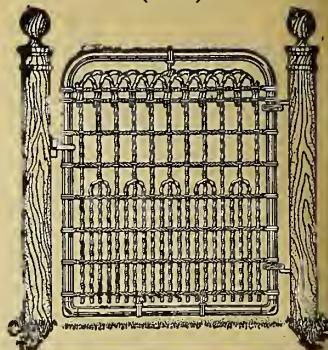


**Perfec-
tion
Flower
Bed
Border
(179)**

Fits any shape or size of flower bed. No posts required. Bottom left straight to be inserted in the ground. Taken up in Fall and used from year to year.
16-inch height, 9 cts. per foot. 22-inch height, 10 cts. per foot.

Universal Walk Gate

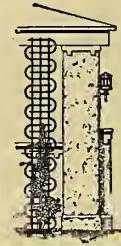
(178)



Heavy steel tubing frame. Fittings for wood posts. 3½-foot Gate, \$3.50

Cyclone Trellis (180)

A most attractive and practical flower and vine trellis. Low priced and durable; the cost is trifling.
Single, 18 inches, 8 cts.



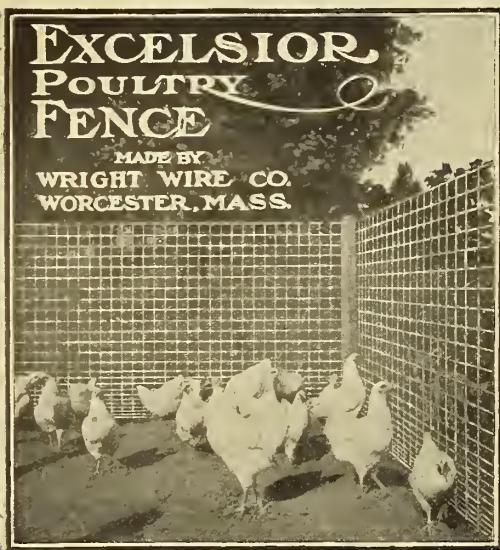
Single Trellis

Excelsior Poultry Fence (181)

Graduated for little chicks and also for poultry. Made of No. 19 wire.

Height Inches	Number of horizontal wires	Approximate lbs. per 10-rod roll	Price per roll.
48	19 .....	.33	\$2.90
60	22 .....	.38	3.35
72	25 .....	.43	3.75

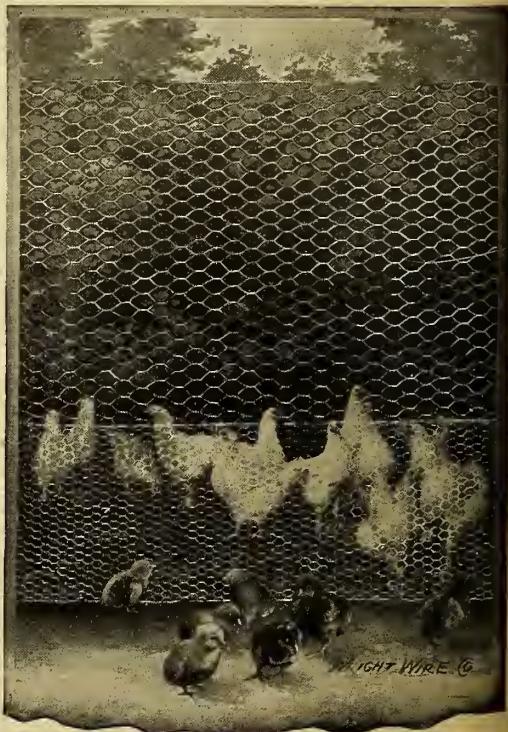
3 rolls or over less 5%.



**The American
Fence Tool (182)**



The best and most useful all-round fence tool. It is a hammer, staple-and-nail-puller, wire cutter, and splicing-tongs combined. The tool is drop-forged from tool-steel, highly and skilfully tempered. We guarantee each tool to be just as represented. Price, \$1. 3 lb.



Galvanized Poultry Netting (183)

Combination 1 in. and 2 in. Mesh Netting.—A popular method of erecting Poultry Netting for yards where small chickens are to be kept on one side and fowls on the other side. Erect a strip 18 or 24 inches wide of 1-inch Mesh Chicken Netting at the bottom and a strip 36 or 48 inches wide of 2-inch Mesh Poultry Netting above the finer mesh as illustrated in cut.

Price for Roll of 150 Running Feet.

No. 19 Gauge Wire

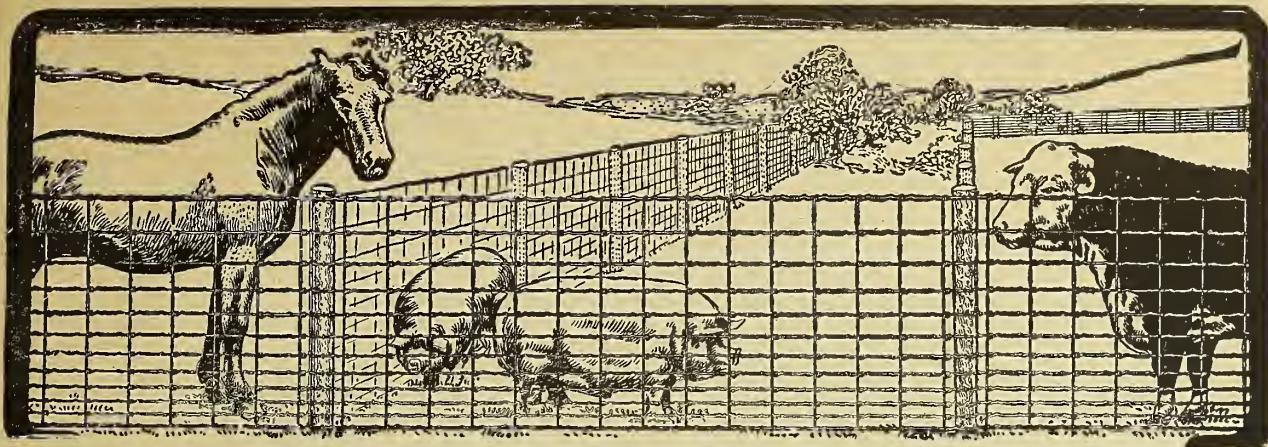
1 ft. 2 in. mesh	\$1.05
1½ " " "	1.58
2 " " "	2.10
2½ " " "	2.63
3 " " "	3.15
4 " " "	3.90
5 " " "	4.87
6 " " "	5.85
7 " " "	2.73
1½ " 1 " "	4.10
2 " " "	5.46
2½ " " "	6.33
3 " " "	7.63

No. 20 Gauge Wire

1 ft. 2 in. mesh	\$.95
1½ " " "	1.43
2 " " "	1.90
2½ " " "	2.38
3 " " "	2.85
4 " " "	3.51
5 " " "	4.38
6 " " "	5.26
7 " " "	2.31
1½ " 1 " "	3.46
2 " " "	4.62
2½ " " "	5.36
3 " " "	6.44

5 Roll lots 5% off; 10 Roll lots and over 10% discount. Freight allowed on

5 Roll lots or over up to 25c. per 100 lbs.



American Horse, Cattle and Hog Fence (184)

A SUBSTANTIAL FENCE plays an important part to the profitable side of farming and the neatness in appearance of a well put up wire fence adds more than double the cost of the fence to the price of the farm. They are to the farm in general what paint is to the buildings. **PUT UP FENCES** and let the hogs and other animals go after the waste places and turn into profit what would otherwise go to waste.

949 x 6

949 x 12

Dimensions contained in the above figures are explained as follows: Figure 9 refers to the number of horizontal wires; figure 49 refers to the height in inches of the fence; and figure 6 refers to the distance apart of the upright bars.

The 949 is the one we sell as a general purpose farm fence and we have sold many carloads. This style we carry with the uprights 12 inches apart known as the 949 x 12, also 6 inches apart known as the 949 x 6. The top and bottom wires of this fence are made of No. 9 wires with the intermediate wires of No. 11. The 949 x 12 serves as a perfect horse and cattle fence, but the 949 x 6 is much stronger as there are twice as many uprights, and on account of the small openings will keep out dogs, etc. The smallest space is at the bottom, 4 inches, then $4\frac{1}{2}$ inches, 5 etc., as shown in the illustration. This smallest space in the 949 x 6 would be 4×6 .

934 x 6

This is the only practical hog fence; 34 inches high with nine wires, the lower space $2\frac{3}{4}$ inches wide, then 3 in., $3\frac{1}{2}$ in., $4\frac{1}{2}$ in., etc.

The convenience of this inexpensive fence makes it a big seller and we have sold thousands of rolls of this particular style for fencing in waste places for hogs. One man in an hour's time can fence in a place that would take two men a day to build with the old style wood fence, and the price of the wood fence in new lumber would be many times the price of this wire fence.

American Steel Fence Posts (185)

Too much cannot be said of the American Steel Fence Post. While the first cost of the steel post and the wood post is practically the same the steel post can be set in about 5 minutes, while the wood post takes surely a half hour. With the American Steel Post the fence line can be burned off every year, thus getting rid of insects, weeds and rubbish. The clean farm grows the best and biggest crops and with the least labor and expense.

STEEL POSTS

Cheaper than wood.
Amply strong to serve the purpose.
Not damaged by fire, lightning, heat, cold, or moisture.
Protect stock from lightning.
Not lifted by frost.
Can be driven in ordinary soil.
Line posts set in any soil by boring 2 inch hole,
Takes on any style of woven fence, barbed, or smooth
wire.

Simple!—nothing to get out of order.
Easily moved.

No special tool required.
Uniform in size, length, and appearance.
Light in weight, reducing transportation.

Every post is a good one—no culls.
Tested for 17 years and found absolutely satisfactory.

We carry a good stock but the following are the best sellers:

7 $\frac{1}{2}$ ft., No. 16, 54 cts. each.

6 $\frac{1}{2}$ ft., No. 16, 43 cts. each.

Send for complete fence catalogue giving all details.

845 x 6

845 x 12

This fence is a general purpose farm fence not quite as expensive as the 949. It is 45 inches high and is the 949 fence with the lower bar omitted, leaving the space $4\frac{1}{2}$ inches instead of 4 inches in the 949. A good seller.

635 x 6

635 x 12

Used by many as a stock fence by placing one or more strands of smooth or barbed wire over the fence to keep cattle from reaching over. Will not turn small pigs but is a good fence for any other purpose where a high fence is not necessary.

We carry the following in 10-rod rolls:

	Weight	Price	Weight	Price
949 x 12	92 lbs.	\$4.15	845 x 6	109 lbs.
949 x 6	120 "	5.25	635 x 12	65 "
934 x 6	108 "	4.85	635 x 6	85 "
845 x 12	83 "	3.79		

American Poultry and Rabbit Fence.

(186)

Made of No. 11 and No. 14 Wire. This fence is much stronger than any other fence sold as a poultry fence, the Top and Bottom Bars No. 11 Galvanized Steel Wire, Intermediate Bars No. 13 Galvanized Steel Wire, Stay Wires No. 14 Galvanized Steel Wire.

At the bottom are four spaces of $1\frac{1}{2}$ inches each; the next five spaces are 2 inches each; the higher spaces graduated to 5 inches.

This fence combines the same features entering into the manufacture of the American Farm Fence, viz.; the Hinge Joint, Tension Curve, amply providing for contraction and expansion, and its adaptability to uneven ground, without cutting or mutilating the fence.

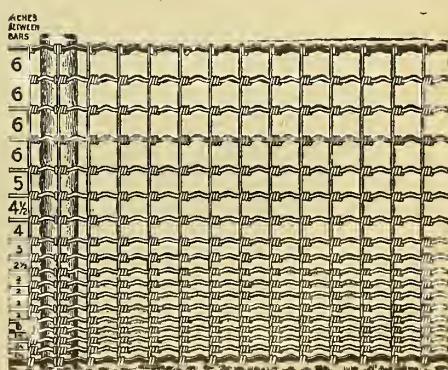
In comparing the price of this fence with other nettings don't forget that you are getting a fence practically as strong as the regular stock fence.

Design	No. of Bars	Height	Weight	List Price 10 rods	Per Roll
2158	21	58 in.	129 lbs.	\$11.90	\$5.90
2053	20	53 in.	122 lbs.	11.30	5.60
1948	19	48 in.	115 lbs.	10.70	5.35

GIBB'S
POST
HOLE
DIGGER
will pay
for itself
in one
day.

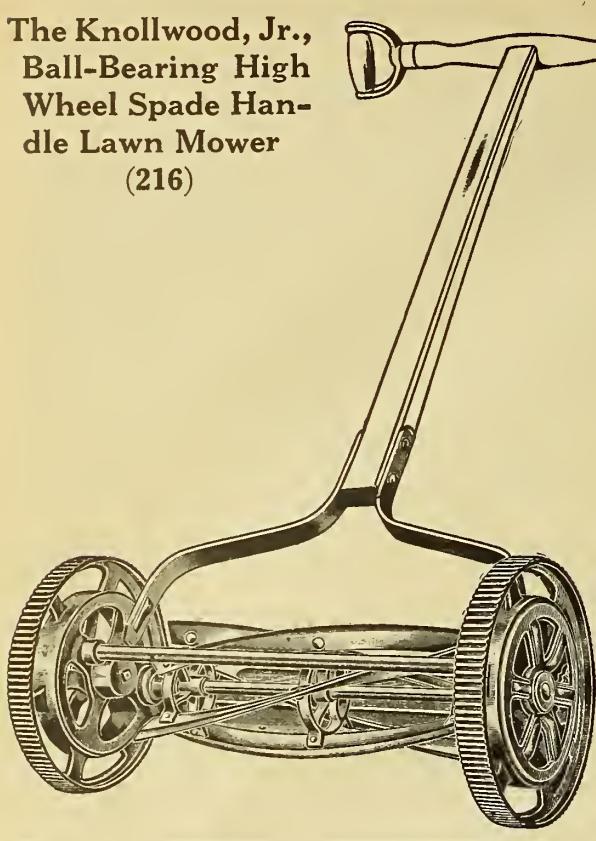
Price
\$1.50

(186a)



The Knollwood, Jr.,
Ball-Bearing High
Wheel Spade Han-
dle Lawn Mower

(216)

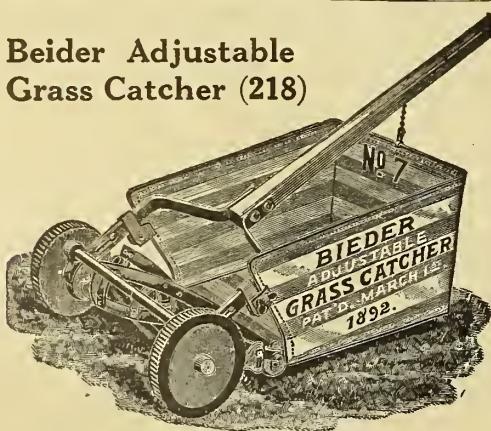


The Little Giant Lawn Mower (217)

For the benefit of those who want a low-priced mower or those who have but a small amount of grass to cut, we offer this machine, and we think we are safe when we state that it is as good as one-half of the mowers sold as a high-grade machine, and being a light-running mower, is preferred by many to the higher grade styles. We warrant every machine and have never had to replace one. 8 in. wheel.

Net prices: 12-inch, \$2.75. 14-inch, \$3.00. 16-inch, \$3.25. 18-inch, \$3.50.

Beider Adjustable Grass Catcher (218)



Gathers grass without the use of a rake, and without time or labor. Made of bright striped canvas on a galvanized frame. They are adjustable in height and width, to fit all sizes and makes of mowers.

No. 7. Fits all Low Wheel Mowers, 18 inches and smaller. Price, 75 cts.
Weight 2 lbs.

No. 13. Fits all High Wheel Mowers, 24 inches and smaller. Net price,
\$1.00. Weight 2 lbs.

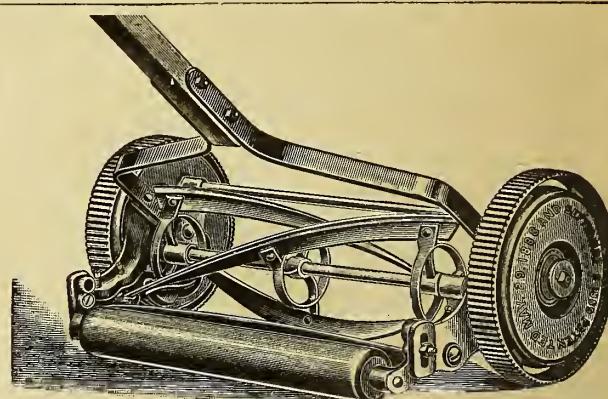
LAWN GOODS OF ALL KINDS

A machine that possesses all the good qualities of other styles

A 20-inch Machine of this make runs as easy as a 12-inch of the old style, with a Handle made to fit your hands.

We offer our customers this machine not as an experiment, but as a guaranteed article, one that we have tested ourselves during the past 5 years, and know what we are talking about. This machine runs on ball bearings (and all first-class machines ought to). The balls used are of the very best quality and will last for years. They are enclosed in steel cups, which protect them from wear. The main axle is steel and lathe fitted and is adjusted as nice as any high priced piece of machinery. The end of the axle where it comes in contact with the balls is cone-shaped, and any possible wear can be easily taken up. The machine has a nine-inch wheel, four knives of the best quality of steel, and, last but not least, handle that is made to fit your hand. (See the spade handle in cut.) After giving you the best mower it is possible for us to get, we have put on to it a handle we have all been looking for. With this Spade Handle the operator has perfect control over the machine and can handle it perfectly on a side hill or on narrow borders. We agree to take back any machine that is not satisfactory, after a fair trial. While this machine is the best one on the market for private homes, it is especially adapted for parks, cemeteries, and large lawns, and to that class of buyers we will make special prices in quantities.

14-inch, \$7.00; 16-inch, \$7.50; 18-inch, \$8.00; 20-inch, \$9.00.

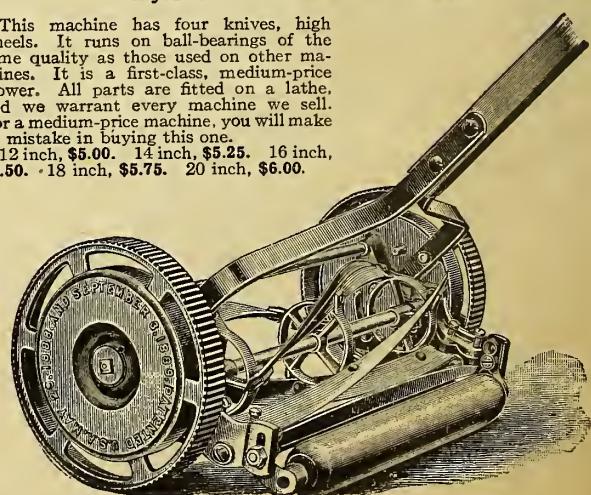


Rossmoyne Lawn Mower (219)

Style C Nine Inch Wheels

This machine has four knives, high wheels. It runs on ball-bearings of the same quality as those used on other machines. It is a first-class, medium-price mower. All parts are fitted on a lathe, and we warrant every machine we sell. For a medium-price machine, you will make no mistake in buying this one.

12 inch, \$5.00. 14 inch, \$5.25. 16 inch, \$5.50. 18 inch, \$5.75. 20 inch, \$6.00.



The Ideal Power Mower and Roller

Has a 38-inch cut, is equipped with expanding band clutch for slow and easy starting and a simple device for idling the knives so that it may be used as a power roller both on the lawn and hay field. Runs any speed from 1 mile to 4½ miles per hour. Has a gear driven, high-tension magneto brake for holding mower on steep grades. Has sufficient power to climb 35% grades and can be used when the expensive and heavy power mower would be of little use.

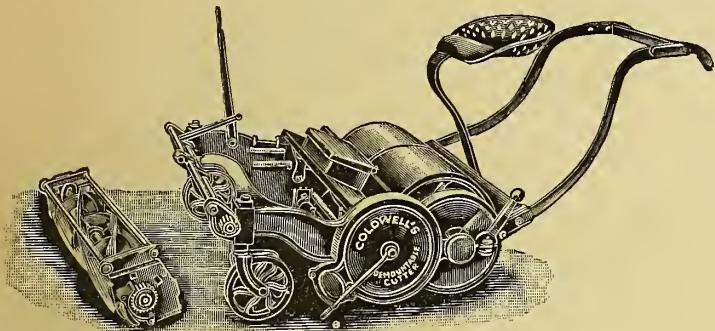
Price, \$490.00. F. O. B. Lansing, Michigan.

The Ideal Jr. Motor Mower has a 25-inch cut, runs at a speed up to 4 miles an hour, climbs a 40% grade and operates at a maximum of 20 cts. for fuel for 10 hours. This is a great labor saving device for private estates, golf links and parks and fills the want between a hand machine and an expensive motor mower.

Price, \$225.00. F. O. B. factory.

Grass catchers furnished for \$5.00 extra. Ask for complete circular.

New Demountable Excelsior Horse Lawn Mower



With Demountable Cutter Unit this Horse Mower is constructed upon an entirely new principle and is a wide departure from anything of the kind ever made. The cutter section, which is the vital part of a lawn mower, is made into a unit and is independent and removable from the main frame of the mower. This unit consists of a simple frame containing the revolving cutter, the bottom or stationary knife and parts necessary for adjusting the same to each other. It is attached to the main frame of the mower by four locking screws and can be attached or removed in less than a minute. It being separate and independent of the main or larger frame, it relieves the knives from the twisting and strain that usually occurs in the frame of the ordinary horse mower when in use on rough ground. This unit, being the cutter section of the mower, is the only part necessary to send into the factory for sharpening or adjusting. The great convenience in handling and the saving in freight and cartage charges between shipping an entire mower and the unit only, will be fully appreciated by all users of horse mowers.

LIST PRICES

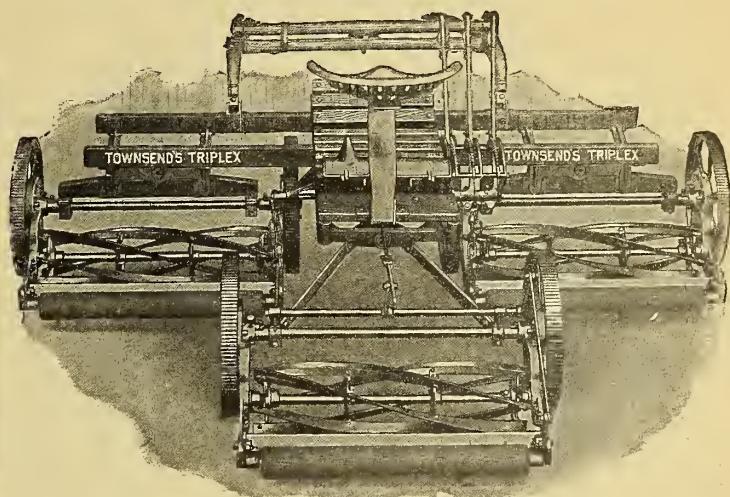
	Four Blades.	Six Blades.
30-inch complete with seat shaft and extra cutter unit	\$180.00	\$190.00
35-inch complete with seat shaft and extra cutter unit	220.00	230.00
40-inch complete with seat shaft and extra cutter unit	260.00	270.00

Discount, 40%

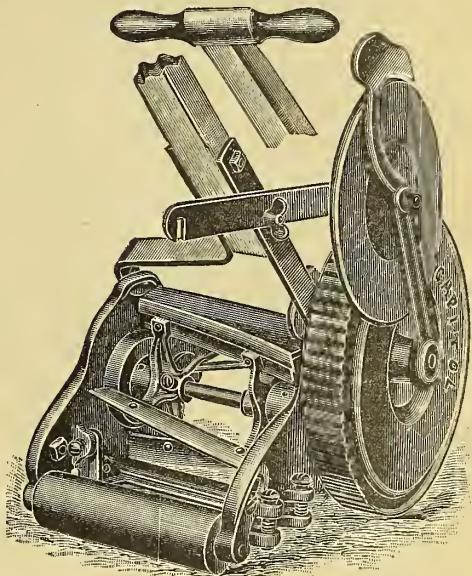
The Townsend Triplex Golf Mower

The TOWNSEND triplex golf mower is specially constructed for mowing on uneven rolling ground. Cuts fully three times the width of an ordinary horse mower and is very light draft. Has given first class satisfaction on golf courses and is fully guaranteed.

Price, \$250.



The Capital Lawn Trimmer



The CAPITOL Lawn Trimmer and edger does what lawn mowers leave undone. It trims and edges your lawn with remarkable speed and perfection; the Shield over the blades protects the flowers. A trial will convince you, as it has thousands of others, that the day of shears, clippers, etc., is past. This machine has four crucible steel blades, six inches in length, which are tempered in oil, swivel bushings, double adjustment, in fact is strictly high grade. Price, \$6.

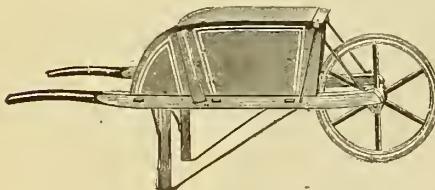
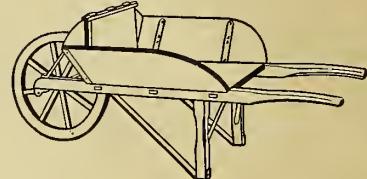
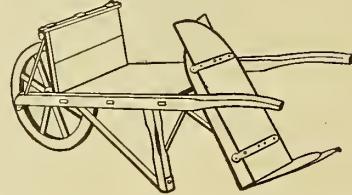
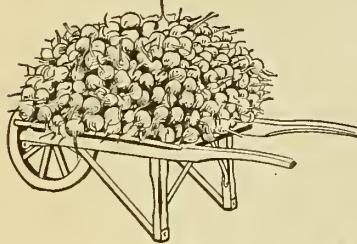
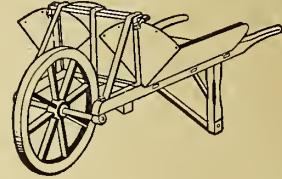
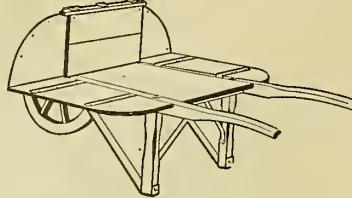
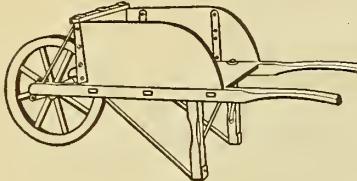
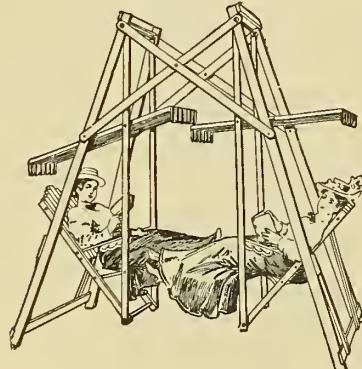
Owing to the unsettled conditions of the market, due to the war, all prices quoted in this catalogue are subject to change without notice.

The Nuway Garden and Lawn Wheel Barrow With sides up same capacity as the No. 4.

While improvements have been made in all kinds of farm and lawn appliances during the past few years there has been no improvement in this one indispensable article for the past 25 years, but no garden outfit is complete without one. It is used for moving all kinds of farm and garden truck and a hundred and one other purposes.

The above illustrations show the different adjustments of this barrow. It can readily be seen that with adjustable sides the capacity of the barrow can be doubled and tripled. This barrow with the sides up holds just one-third the amount that it does with the sides tipped, showing a load of bunch beets. It can be used as a garden or dump barrow for moving any kind of material. It is especially adapted for farm and garden work, made of first-class material, hard wood frame, iron hub, steel tire, heavy iron braces, all the wood work painted three coats, nicely finished in red, and varnished. Price \$4.50.

If we have no agent in your town for this barrow we will prepay the freight, at this price.

**Arctic Lawn Swing**

With or Without Awning

As a swing this affords the most comfortable lounging you can think of. The backs of the chairs are adjustable, and can be set up straight or inclined at as great an angle as you wish. Two-passenger. Price, with awning, \$7; without awning, \$6. Four-passenger, no awning, \$9. If not set up, 50 cts. less.

Step Ladders

PARIS, 28 cts. per ft.

CHALLENGE, 35 cts. per ft.

No. 4 Ross Special Barrow

This barrow is made exactly like the Nuway except that it is equipped with removable sideboards. This wheelbarrow is made specially for us, is well constructed throughout, of hard wood and strongly ironed. Finished with two coats of paint and one coat of varnish. This is the best low-priced garden barrow on the market. Price, \$3.75.

Neponset Flower Pots (230)

No. in Crate	Size	Packed for Shipment	Per 100	1,000
1,000	2 1/4-in. pots	20 lbs.	\$ 0.25	\$ 2.20
1,000	2 1/2-in. pots	23 lbs.	.30	2.40
1,000	3 -in. pots	33 lbs.	.45	3.90
1,000	3 1/2-in. pots	44 lbs.	.60	5.15
500	4 -in. pots	38 lbs.	.80	6.90
500	5 -in. pots	56 lbs.	1.20	10.35
500	6 -in. pots	74 lbs.	1.65	14.55

Not less than original crates at 1,000 rate. Samples by mail.

List of Pans, Standard Flower Pots and Saucers with Rims (231)

Inside measurement, width and depth equal.

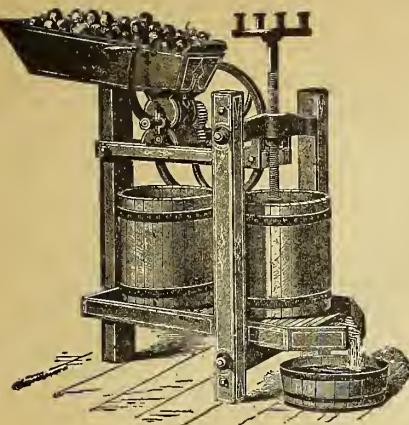
Size.	Per 1,000
1 3/4-in.	\$ 7.00
2 -in.	8.00
2 1/4-in.	9.00
2 1/2-in.	11.00
2 3/4-in.	12.50
3 -in.	14.00
3 1/2-in.	17.00

Pots Each.	Pots Doz.	Saucers Each.	Saucers Doz.
4-in.	\$.03	\$.22	\$.20
5-in.	.04	.36	.25
6-in.	.05	.54	.30
7-in.	.09	.90	.56
8-in.	.12	1.26	.54
9-in.	.16	1.80	.62
10-in.	.22	2.43	.90
11-in.	.29	3.25	1.08
12-in.	.40	4.50	1.35
13-in.	.60	6.75	1.80
14-in.	.80	8.00	2.00
15-in.	1.20	11.00	2.50
16-in.	1.50	15.00	2.75
18-in.	2.40	26.00	4.00

**Round Seed Pans (232)**

Size.	Each.	Doz.	Size.	Each.	Doz.
6-in.	\$.06	\$.58	10-in.	\$.15	\$ 1.62
7-in.	.08	.75	12-in.	.30	3.15
8-in.	.10	.95	14-in.	.60	6.75
9-in.	.12	1.30			

500-lots, 30 per cent discount from list; 1,000 lots, 40 per cent discount from manufacturer's list.

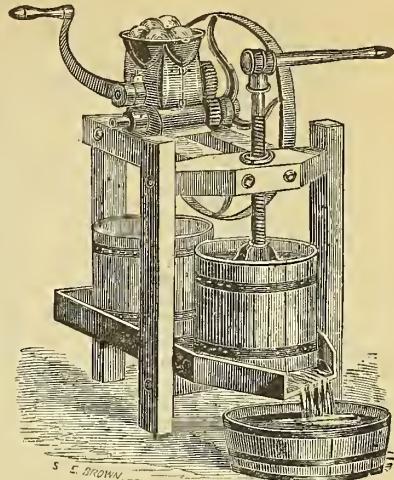
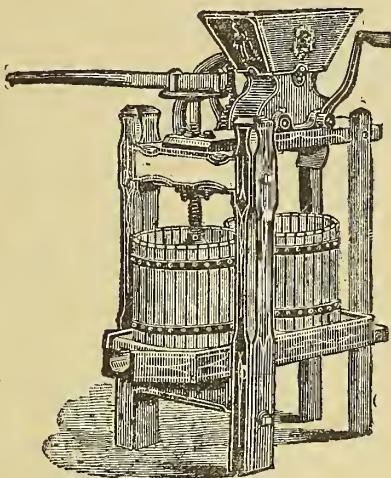


**National Cider Mill
Farmer's Size
(234)**

The grinding arrangement works in such a manner that the cells of the fruit are all broken, and fine pomace produces more cider from a given quantity of apples than can be made by other mills. Net cash price, \$24.

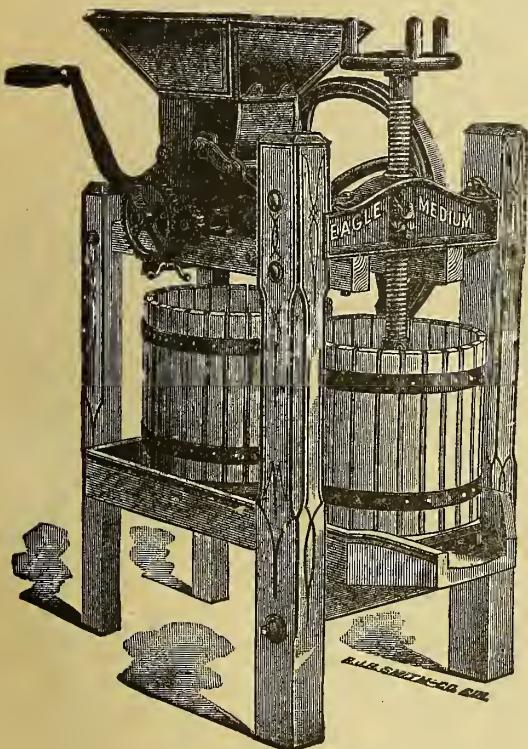
Junior Cider Mill (235)

It runs very easily and is well worth the difference in price over the Iamit, as it has two curbs and a grinder of larger capacity. Net cash price, \$14.



**National Cider Mill,
Family Size (238)**

Especially adapted for family use, being light, strong and convenient. It is exactly the same in principle as the Farmer's Mill, only of smaller size and sold at a less price. The mill will pay for itself in one season, by gathering the windfalls, and making them into cider for vinegar for the market. This is just the size for that purpose. Two curbs. Net cash price, \$17.



**Medium Farm Mill
(237)**

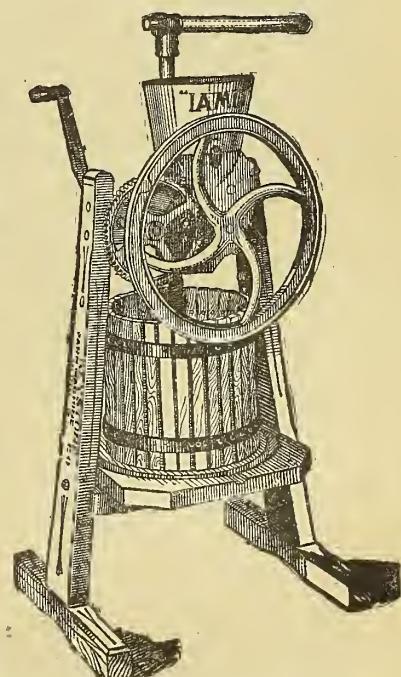
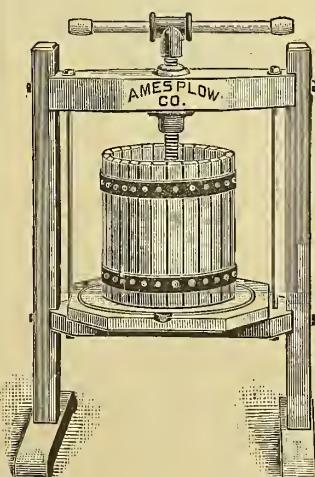
This is a good-sized mill for farmers' use. It is built with iron beam and heavy gearing and is perfectly adjustable for all kinds of fruit. Net cash price, \$15.50.

Wine and Lard Presses (236)

Seven sizes adapted for all uses.

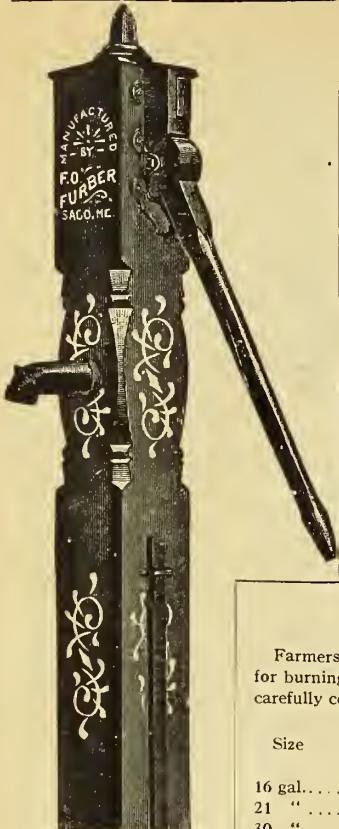
	Curb Inside	Screw	Price
No. 1	10½x8½	1 in....	\$ 5.25
No. 2	12½x12	1½ in....	6.50
No. 3	15 x13	1¼ in....	9.50
No. 3½	16 x15	2 in....	15.25
Iron beam.			
No. 4	17 x16	2 in....	22.50
Iron beam.			
No. 4	17 x16	2 in....	27.00
Iron geared.			
No. 5	20 x18	2½ in....	36.00
Iron geared.			

Discount for cash, 5%.



**The Iamit Cider Mill
(239)**

The Iamit is a mill and press combined. It will grind apples, and you don't have to poke them into the discs. It cuts and scrapes the apples, thereby breaking all the cells. It will grind at the rate of one-half bushel per minute. Net cash price, \$9.00.



Furber Wood Pump (240)

6 x 6 for house use. 7 x 7 for stock. 6 x 6 in. Stock, 3½ bore for general use.

	Porcelain-lined	Unlined
7-ft. long.....	\$ 7.60	\$ 6.10
8-ft. long.....	8.20	6.70
10-ft. long.....	9.40	7.90
12-ft. long.....	10.60	9.10
14-ft. long.....	11.80	10.30
16-ft. long.....	13.00	11.50

Use 4 x 4 inch pipe for above pumps. Price, 21 cts. per foot. Couplings and bands for the above, 50 cts. each.

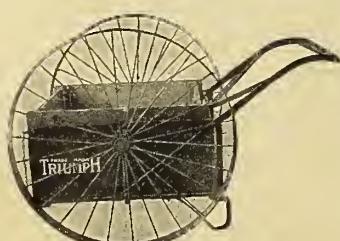
7 x 7 in. stock, 4-in. bore—7 ft. long, porcelain-lined, \$9.75; unlined, \$8. 8 ft. long, porcelain-lined, \$10.75; unlined, \$9.

Use 4½ x 4½ inch pipe, 29 cts. per foot. Couplings and bands for the above, 60 cts. each. 25 per cent discount from above prices.

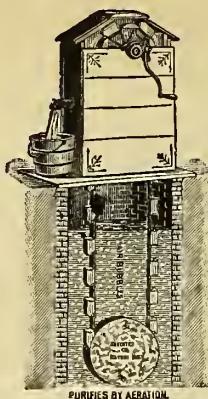
Wire Rubbish Burners (241)



No. 1..... \$2.00
No. 2..... 1.50
No. 3..... 1.25



PRICE AS SHOWN. Truck, Plain - - - \$10.50
" with Side Boards - - - 11.25

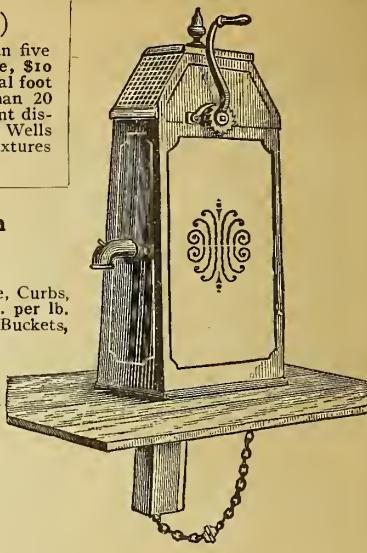


The Bucket Pump (241A)

We will guarantee it to purify any well in five days, or we will refund the money. Price, \$10 for the first ten feet of well. Each additional foot of well, 50 cts. Discount for well less than 20 feet, 10 per cent; 20 feet and over, 20 per cent discount. Cash with order, 5 per cent extra. Wells over forty feet deep require extra heavy fixtures for which there is an extra charge of \$1.

Rubber Bucket Chain Pump (242)

They are the best cheap pumps. Price, Curbs, \$2.75 each. Chain (3 ft. to lb.) 10 cts. per lb. Wood Tubing, 10 cts. per ft. Rubber Buckets, 15 cts. each.



Majestic Rotary Washers (246)

Ball bearings and balance fly-wheel almost make it run itself. Price, \$7.00.

Barstow Cauldron Stoves

Farmers, Butchers and Bakers use this stove to advantage. Can be fitted for burning either coal or wood and is made of the best quality of iron and carefully constructed.

Size	Complete with For Coal	Kettle For Wood	Diam. of Kettle	Height of Stove
16 gal.....	\$13.50	\$12.00	21½ in.	31½ in.
21 "	14.75	13.50	22¼ " "	35¼ "
30 "	20.25	18.25	25¾ " "	33½ "
36 "	21.50	20.25	25½ " "	35¾ "
45 "	23.25	21.75	31½ " "	37 "



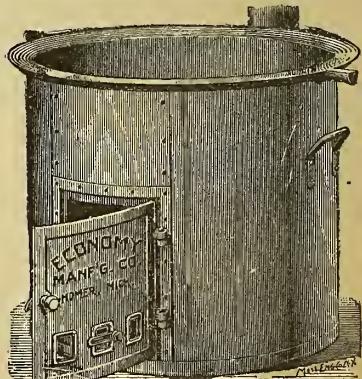
Triumph Carts
Farmers Low Down Cart

Especially built for use on the farm, for carrying milk cans, crates, barrels and general farm produce. Substantial full bolted construction, with very strong steel wire wheels.

No. 12 Water barrel truck (not shown).....	\$8.50
Barrel.....	.50
Leaf rack (extra)	6.50
Triumph box	4.00



Economy Boilers (245)

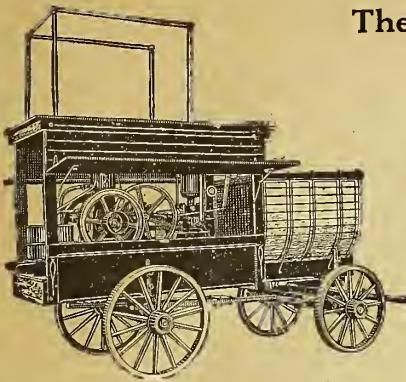


No Farmer can afford to be without a farm boiler or large kettle of some kind. The Economy, shown in cut, is the cheapest of any on the market.

For out-door use only as it has no grate. Prices: 33 Gal. list \$14, net cash price \$9.75. 48 Gal. list \$16, net cash price, \$11.50. 65 Gal. list \$20, net cash price \$14.50. Other sizes furnished if desired.

Hand and Power Sprayers for All Purposes

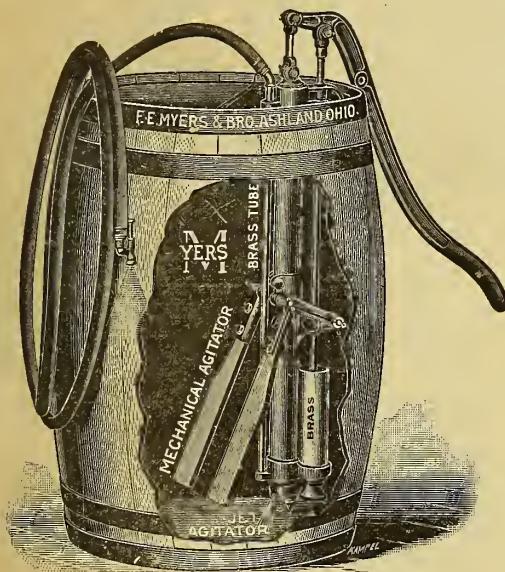
The International Power Sprayer (249)



In buying this outfit you get the following: First-class Wilbur Wagon gear, 200-gallon capacity cedar tank with platform, guard rails and fenders, oil-cloth drop curtains that will completely house the working parts when out of doors, tank with special agitator, 2-horse International Gasoline Engine which is connected by cut gears to an Alert No. 2 pump, fully equipped with pressure gauge, pressure relief valve, two lengths of $\frac{1}{2}$ inch hose, one 15 feet and one 25 feet, two bamboo lined extension poles 10 feet long with shut-off valve, long permanent shank hose couplings with 3-way double shut out at pump, 5 feet of 1-inch overflow rubber hose.

The agitator equipment is all bronze and brass and is not affected by lime, sulphur, or salt.

Price of complete outfit as shown, \$300.



No. 305 Brass Spray Pump (250)

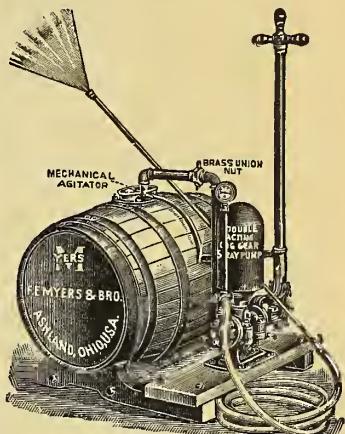
The construction of this pump is the very best possible, and we believe it is unequaled for the money. Bronze ball valve, with brass seat, the plunger is brass, with hemp packing, and it will handle hot, cold or any caustic mixture. Cylinder and discharge pipes are brass. The air-chamber is 30 inches long. Uniform and constant stream; pump sets inside the barrel, entirely submerged. Complete, including barrel, extension pipe, nozzle, mechanical agitator, and 15 feet of hose all ready for work. There are lots of higher-priced pumps on the market than this one, but none better or more practical for general use. We have sold hundreds of them and they always give satisfaction, and we will gladly refund the money paid for one of these pumps if it should not prove satisfactory in every way. Price, complete, \$12.50 Without hose, \$11.00 5% off for cash.

The Worcester Double Acting Cog Gear Spray Pump (251)

Mounted on skids with 50-gallon barrel and mechanical agitator. This is a pump with nearly the same capacity as those operated by power but at a very low price and designed for those having a large orchard and do not care to invest \$100 or \$200 in a spray pump. This pump can be loaded onto a wagon or stone boat and spraying can be done under heavy pressure. It occupies a small amount of space but has power and capacity sufficient for running 8 nozzles at one time. It is fitted with brass valves, ground bevel brass seats, 2-inch seamless brass removable cylinder, hemp packed plunger. In fact it is a power outfit in every way excepting it is operated by hand. The pump complete is, one 50 gal. barrel mounted on skids, pressure gauge, 15 ft. $\frac{1}{2}$ " hose, 8 ft. extension pipe with lever shut-off, mechanical agitator with fem-bro nozzle, or any nozzle selected.

The price of the complete outfit \$30, net cash price \$25.

We can furnish hose for this pump in 25 and 50-foot lengths.



The O. K. Spray Pump (252)



This pump will handle hot or cold mixtures and is a powerful hand pump. It is furnished complete, ready for use. Equipment: pump complete with agitator, barrel, extension pipe, 25 ft. of $\frac{1}{2}$ " hose and spray nozzle. Price, \$14.00. 5% discount for cash.

Brass Strainer

Ninety per cent of all nozzle trouble is caused by clogging. Use a brass strainer. Price 50 cts. Can be used with nearly all styles of nozzles.

Myers' Whitewash and Painting Machine and General Purpose Spray Pump (253)

The most durable spray pump for whitewashing and applying cold water paint there is made. All parts are of the best material and with proper care will last for a life time. Price \$8. Weight 26 lbs.

NO. 18 LIGHTNING TANK WHITEWASHER. (254)

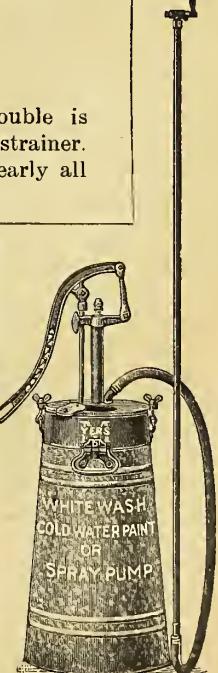
For whitewashing henhouses, stables, etc. The pump is fitted with hose and pipe, and has a nozzle that is guaranteed to spray whitewash without clogging. Price, \$5. Wgt. 15 lbs.

DAISY TIN FORCE PUMP (not shown)

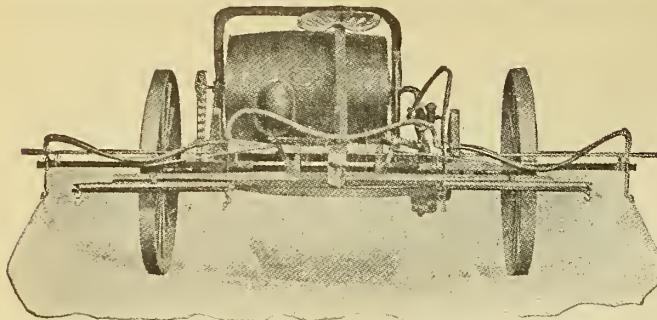
This is a good low-priced force pump; used for sprinkling vines and shrubs; also used for whitewashing and other similar uses. Made of tin and has two nozzles. Price, \$1.



No. 18



SIMPLEX FOUR-ROW POTATO SPRAYER (255)



This sprayer has been tested thoroughly in different sections of New England and it has been used in the large potato growing districts in the West for a number of years and in that territory has received the most severe test that is possible to put a machine of this kind to. This Sprayer has a 3 x 7 inch pump, all working parts brass, cam driven, with four independent bronze ball checks, with capacity to supply 12 nozzles at 150 lb. pressure. The barrel or tank holds 52 gallons and revolves on its axis, thereby keeping the mixture thoroughly stirred and thus preventing clogging of the nozzles, and doing away with all unnecessary parts which are required to operate an inside agitator.

Frame is built of angle steel. Wheels are of steel with concave tire. Axle 1 7-10 inch cold rolled shafting long enough to allow wheels to straddle two rows. Wheels are adjustable on shaft. Spray spar made so that nozzles may be set to spray over rows anywhere from 2 ft. 8 in., to 4 ft. apart and may be shifted to reach uneven rows while spraying. Sprayers all have large Air Compression Chamber with Automatic Pressure Regulator and Shut-Off. All working parts in front of driver.

Price, with Pole or Shafts, 4-Row, \$55. 5% discount for cash.

“PERFECTION” SPRAYER (256)

Built on the best lines, of high grade material and with the idea of turning out a sprayer which has none of the faults and defects so common in many Knap-sack sprayers heretofore on the market.

The tanks are made of heavier metal than has ever been used in sprayers of this kind, are lock seamed at the corners to convex heads of metal two gauges heavier than the sides, a single seam runs lengthwise of the tank. This seam is reinforced by rivets making the tank practically unbreakable. The pump is 1 3/4-inch seamless brass tubing with a brass valve, and is sealed into the top of the tank with heavy threads following the construction used in the best makes of fire extinguishers. The pump rod is 5-16 in. and is fitted with anhydrous leather and our special metal expanders.

The hose is attached to the sprayer at an angle so that it will not kink and become cracked and broken. The shoulder strap is attached with snaps and can be quickly and easily removed. The hose is

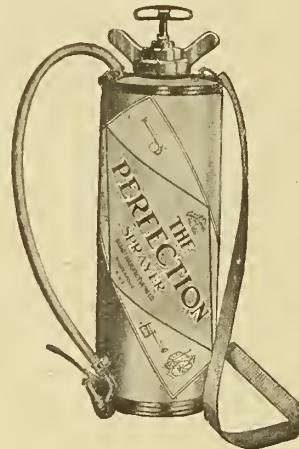
3/8-inch 5-ply cloth inserted and is equipped with our automatic shut-off nozzle.

This Sprayer will handle Whitewash, Water Paints, Bordeaux Mixtures, etc., perfectly.

For whitewash and all heavy mixtures it is necessary to use a "W. W." Cap in nozzle, which is furnished with sprayers.

These sprayers are made in galvanized steel or brass as ordered. Weight, 9 pounds empty. All sprayers tested to 60 pounds before leaving factory.

All Brass \$7.00.

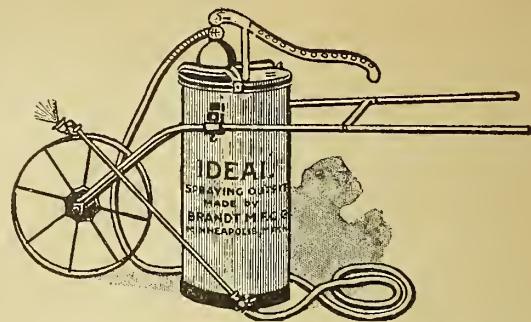


LITTLE GIANT BRASS SPRAY PUMP (273)

For washing windows and sprinkling lawns where there is no water pressure. Has foot rest, best hose and spray nozzle. **Price**, \$2.75. Weight 6 lbs.



“IDEAL” SPRAY OUTFIT (257)



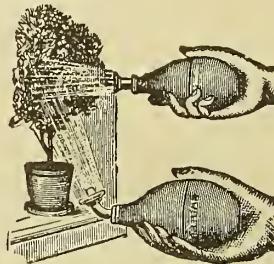
This outfit is light, compact and easy to operate. The tank holds fifteen gallons, is mounted so that the liquid will not slop or spill, and in a way that makes it easy to handle. The pump spreads across the top of the tank and is held firmly in place by a thumb nut. It has the largest air chamber of any spray pump of corresponding size. This enables the operator to keep a uniform pressure at the nozzle.

The pump barrel is 1 3/4 inches in diameter, 7 inches in length. The plunger is made of brass and is self-oiling. The packing is cotton wick, which will resist the action of the chemicals used for spraying and can be tightened without removing from the pump. The valves are bronze balls 5/8 of an inch in diameter, which allows free passage of the liquids and prevents clogging. Both valves are removable. The pump handle is extra long and a pressure of one hundred and fifty pounds can be easily maintained.

A mechanical agitator keeps the liquids well stirred. A fine strainer at the opening in the suction pipe prevents anything getting into the working parts of the pump. The pump has the following equipment:

10 feet, 3/8-inch Pressure Hose; 1 "Ideal" Nozzle;
8 feet Pipe Extension, in 2 pieces; 1 Brass Shut-off Cock.
Shipping Weight, crated, 60 pounds.

Price
5% off for cash.



Rubber Atomizer (258)

Useful for sprinkling house plants and also for spraying hellebore and bug death. Either style of neck.

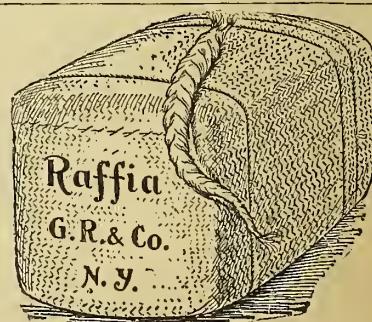
Small size, 50 cents; large size, \$1



Rochester Self-Operating Sprayers (259)

The air enters the sprayer through the valve at bottom of pump, thoroughly agitating and mixing the contents of Sprayer. The compressed air, being powerful, forces the liquid out through the outlet pipe, making either a fine spray or a solid continuous stream as desired. This size machine holds from 3 to 4 gallons. **Price**, Galvanized Iron, Style G, \$5. Brass, \$7.55. Discount for cash, 50 cts. Weight 9 lbs.

Made of Galvanized iron or brass.



RAFFIA (260) Price
18 cts. per lb., in 5
lb. lots, 15 cents per
lb. Comes in braids
weighing about 1 1/4
lbs. Cannot be divided
smaller.

THE AUTO-SPRAY PUMP NO. 1. (261)

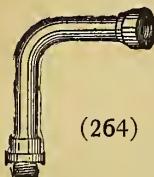


(262)

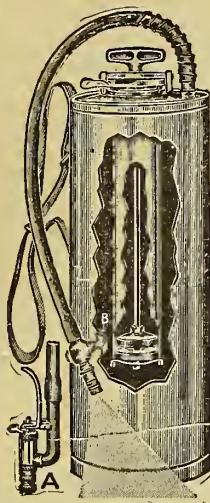


AUTO POP NO. 1

(263)



(264)



PATENTED.

The "Auto-Spray" No. 1 B, works automatically for six to fifteen minutes according to the nozzle opening. It may be charged in fifteen seconds by a few strokes of the plunger, and two pumpings will usually discharge the entire contents. Simply fill two-thirds full of solution and pump up air pressure. Diameter, 7 inches; height, 2 feet; capacity, 4 gallons; weight, 16 lbs, with all attachments. Price with stop-cock, \$8.00.

AUTO HOSE COCK NO. 1. (263). Price, \$1.25.

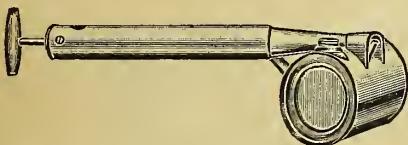
TWO ROW ATTACHMENT. (262). Price, \$1.50.

TWO FOOT BRASS EXTENSION. Price, 50 cts.

BRASS ELBOW. (264). Price, 50 cts.

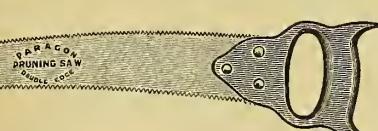
Discount for cash, 10%.

LITTLE MIDGET SPRAYER



This is a small sized, powerful atomizer for use in the home or poultry house. Very convenient for applying dust layers or disinfectants. Price 35 cts. each.

PRUNING SAWS (267)



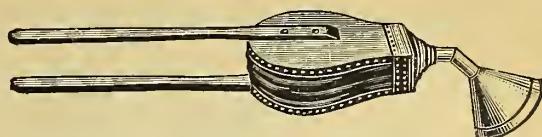
(268)

The best hand-pruning saws ever made, either pull or push. Price, curved edges 16-in. 60 cts., 18-in. 75 cts. Straight, 16-in. 50 cts., 18-in. 60 cts. One edge, 18-in. 60 cts. Weight 1 lb.

E. C. ATKINS & CO. INDIANAPOLIS

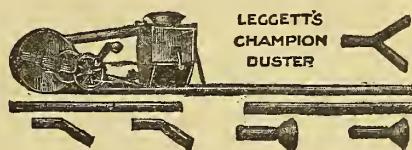
(269)

ACME POWDER GUN (270)



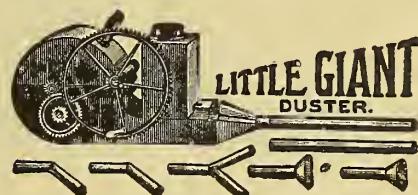
A simple, practical implement for the extermination of potato bugs and all kinds of insects, flies, etc.; the pests of house and garden. Net price, single, \$1; double, \$1.50. Weight 4 lbs.

CHAMPION PARIS GREEN OR DRY POWDER GUN (271)



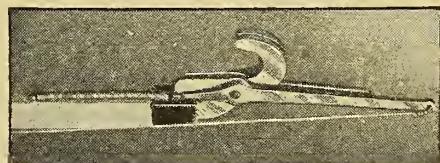
For distributing dry insecticides and fungicides. Sure, rapid, safe, strong, and cheap. Price, \$9. Weight 12 lbs.

IMPROVED LITTLE GIANT DUSTER (272)



Distributes all kinds of powder. Price, \$7. Weight 12 lbs.

HIGLEY'S PRUNERS (284)



The cut shows a picture of Higley's Self Holding Pruner. The only satisfactory pruner ever used. Indorsed by the Moth Commission of the State of Massachusetts, also by tree wardens generally. No wire or metal from the blade to electrocute the user.

We have them in all sizes from 10 ft. up, both of the plain and self holding type.

The Self Holding Pruner grasps the branch and holds it firm until released by the rope. With this pruner one man can do the work of two.

Price, plain, 10 ft. \$1.00, 12 ft. \$1.10, 14 ft. \$1.20, 16 ft. \$1.30, 18 ft. \$1.40, 20 ft. \$1.50. Self Holding, 10 ft. \$1.25, 12 ft. \$1.35, 14 ft. \$1.50, 16 ft. \$1.65, 18 ft. \$1.75, 20 ft. \$1.85.

SPECIAL NOZZLES for High Pressure Hand and Power Sprayers

The best outfit ever made is of very little use unless you have the proper nozzle, one that will spray and not one that will simply sprinkle.



Power Nozzle with Disgorger or Self Cleaner (276)

Power Nozzle with Disgorger or Self Cleaner. (276.) This nozzle operates by the liquid passing through the water way and then through the spiral groove around the center part of the nozzle, thus forming a whirling motion which in connection with the passing in through the steel plate forms the spray.

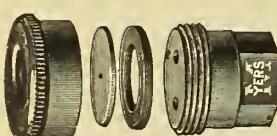
When the Nozzle becomes clogged, by pressing the nozzle against the limb of a tree the small disgorging pin is thrust through the spray opening in the steel disc which cleans it, after which the natural pressure from the pump forces the nozzle open ready for spraying again. Price, \$1.50 each. Weight 1 lb.

The Myers Way Nozzle (277)

THE MYERS WAY NOZZLE. This nozzle has a large capacity so constructed as to throw a broad fan-like spray at an angle of 45 degrees enabling the user to reach the innermost part of the tree. It operates by the liquid passing through a hole in the center of the nozzle body striking against the spray disc, the force which deflects it to the angle of 45 degrees, forming a fan-like misted spray, similar to the Bordeaux.

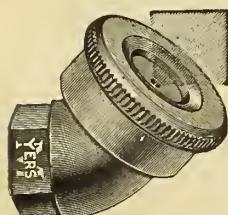
The special advantage of this nozzle is its wearing quality. The Spray disc is the only part that will wear. This disc can, by loosening the thumb nut, be turned around bringing 12 different wearing surfaces over the opening, thus increasing the wear 12 times over the ordinary nozzle.

To clean the nozzle turn the enlarged opening over the discharge port, when it will throw a solid stream cleaning itself immediately. This nozzle is recommended for general use on both hand and power sprayers. Net cash price, 85 cts. Weight 1 lb.



Fembro Nozzle (278)

Showing parts of the Fembro Nozzle and how it is made.



FEMBRO 45 degree nozzle. (279.) This nozzle is the same as the hand spray nozzle only made on an angle which enables the operator to get inside of the tree and in under the foliage. Price, 75 cts. Weight $\frac{1}{4}$ lb.

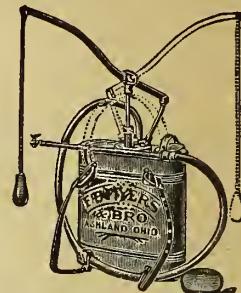
FEMBRO NOZZLE (280) is the same size and capacity as the Power Nozzle but without the self-cleaning device. This Nozzle is fitted with a removable steel disc in the cap. Price, 75 cts. Weight $\frac{1}{4}$ lb.

For Parcel Post Rates see inside of front cover

Myers Knapsack Spray Pump (281)

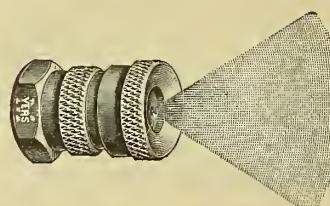
The tank of this pump made of copper, holds 5 gallons and is fitted with lid and strainer, which can be removed. The pump is made of brass with large air chamber, brass ball valves solid plunger and agitator. It is so arranged that no water can drip on the operator. The pump can be removed easily. The pump is also fitted with handle so the operator can use it the same as a tank with bucket pump if desired and the handle lever can be shifted from right to left shoulder at will. Has brass stop cock at end of hose.

A general purpose pump for all low growing shrubs and vines. Price, \$10. Weight 16 lbs.



Bordeaux Special (282)

This Nozzle will throw a fine fan-shaped spray and will readily free itself should it become clogged, by turning cock handle. It will throw a solid stream or it may be shut off altogether if desired. Price, 85 cts. Weight 1 lb.



Imperial Nozzle (283)

Used on Little Giant Hand Pump or may be used on any of the small pumps operated by hand. Price, 75 cts. Weight 2 ozs.



KIRKE FEEDER

KIRKE FEEDER

(A DISTRIBUTING CONTAINER)

The "Kirke System" of fertilizing, or destroying insects, requires the attachment of a simple device to your garden hose.

This consists of the KIRKE FEEDER, a cylindrical cartridge container, which is easily connected to any standard size water faucet, and in which is placed a Kirke Fertilizer Cartridge or a Kirke Insecticide or Fungicide Cartridge.

KIRKE FERTILIZER CARTRIDGE, as used in the Kirke System is transformed into a liquid fertilizer of the proper proportions for highest efficiency, without the slow and laborious method of mixing the chemicals with water.

PRICE OF CARTRIDGES

	doz.	each	doz.	each
Plant Food	-\$3.00	30 cts.	Hot-House special tobacco	\$5.00 50 cts.
Tobacco	-\$3.00	30 cts.	Fertilizer	-\$3.00 .30 cts.
Arsenate of Lead	\$4.50	45 cts.	Bordeau	-\$3.00 30 cts.

PRICE OF KIRKE FEEDER, (Nickel Plated) \$3 each

Boston Spray Nozzle (260)

Will throw a coarse or a fine spray, a large or a small solid stream.

Price, 40 cts.

HAWE'S ANT DESTROYER. Guaranteed to drive ants from any lawn. Put up in powder form and used by scattering on the ant-hills. The ants never come back. 15 cts.

ARSENATE OF LEAD. The best insecticide known for leaf-eating insects because it kills quickly. Trees or plants sprayed with arsenate of lead and water are quickly freed from their insect pests. It cannot injure the most delicate foliage. Respraying after rains is the bane of the fruit-grower's life. Arsenate of lead dries on the leaves into a varnish-like film, which is not affected by dew or rain. One thorough spraying will protect the foliage for an entire season. 1-lb. glass jars, 20 cts.; 5-lb. glass pails, at 18 cts. per lb.; 10-lb. glass pails, at 16 cts. per lb.; 20-lb. wooden pails, at 15 cts. per lb.; 50-lb. wooden pails, at 13 cts. per lb.; 100-lb. kegs at 12 cts per lb.



Pat; March 16 and Nov; 9, 1906
Pat; in Canada Nov. 2, 1897

DRY BORDEAUX MIXTURE AND PARIS GREEN. It kills potato bugs and all plant-eating pests, prevents blight and rust, keeps potato and tomato vines and other foliage in a green and vigorous condition. In one- and three-pound boxes, lb. 30 cts.

BORDEAUX MIXTURE. (Liquid.) This mixture is put up in one-gallon patent cans. Retalls for \$1. One gallon will make 50 gallons by the addition of 49 gallons of water. Gallon cans, \$1. Weight 9 lbs.

CARBOLINEUM. Of the numerous preservative compounds on the market Avenarius Carbolineum stands alone as time-tried and thoroughly tested. It is the only superficial preservative method that has been used the world over and demonstrated its value in the thirty years past. It is the only one that has received recognition and met with the approbation of engineers of Europe and America — the only preparation favorably reported along with the reliable but expensive and inconvenient Creosoting and Burneting processes. Gal. can, \$1.25. Weight 11 lbs.

CARBONOL

CARBONOL. Used as a general disinfectant in the hen-house. Diluted 1 to 100 (about 2 tablespoons to a gallon of water), will keep it clean and healthful.

It is superior as a remedy for chicken cholera, gapes, roup, canker, etc. Will kill lice and destroy any disease germs before they have a chance to infect the flock.

The strong odor so often noticed in the stable can be prevented by spraying the floors and walls with a solution of CARBONOL (4 tablespoons to a pail of water).

Galls, sores and wounds are quickly healed when washed frequently with a solution of CARBONOL.

4 oz. bottles, 25 cts., 16 oz. bottles 50 cts., 1 gal. \$1.75. Weight 11 lbs.
Sample will be mailed free on request.

CREOSOTE FOR GYPSY MOTHS. For the destruction of the eggs of gypsy moth. Qt. 20 cts., shipping weight 3 lbs.; gal. 50 cts., weight 9 lbs.; 5 gals. \$2.25.

POTASH WHALE OIL SOAP. Potash Whale Oil Soap can be used effectively on nearly all plants and vegetables. Is not poisonous to man or animals but kills the bugs. Will kill Aphis, Codling Moth, San Jose Scale, Scab, Wooly Louse, etc., 50-lb. kegs, 6 cts. per lb.; 100-lb. kegs, 5½ cts., per lb.; 170-lb. kegs, 5 cts. per lb.; ½ bbls., 275 lbs., 4¾ cts. per lb.; barrels, 425 lbs., 4 cts. per lb.

CUTWORM FOOD. Rid your garden and farm of the Cutworm pest. There was a time when Cutworms were not considered very seriously by farmers and market gardeners, but in late years it seems they have come to stay. Cutworm Food cannot harm plants and is safe and easy for the operator. Put up in one-, five- and ten-pound packages. Directions for using on every package. Price 1 lb. 25 cts., 5 lbs. \$1.00. Shipping weight 2 lbs. and 6 lbs.

GERM-A-THOL. Is the greatest, disinfectant, deodorizer, detergent (cleaner), insecticide, bactericide and antiseptic, and is needed by housekeepers, cleaners, janitors, hotel proprietors, doctors, nurses, gardeners, laundrymen, poultrymen, horse men, sheep-raisers, and by everyone seeking health, comfort and cleanliness. Price, 25 cts., 50 cts., and 75 cts.

HELEBORE. Sure death to the currant worm. Lb. 25 cts., ½ lb. 15 cts., ¼ lb. 10 cts.

KEROSENE EMULSION. Not injurious to foliage, and a sure remedy for lice, scale insects and most soft-bodied insects. Very valuable for washing domestic pets. Kills by contact. Qt. 40 cts., gal. \$1.00.

LEMON OIL. One of the cheapest, safest and most effectual insecticides. Dilute with 40 to 50 parts water. An excellent wash for dogs, curing mange, killing insects. ½ pt. 25 cts., pt. 40 cts., qt. 75 cts., ½ gal. \$1.25, gal. \$2.00.

BOWKER'S CONCENTRATED LIME SULPHUR. Kills San Jose Scale, Oyster Shell bark lice, etc., and gives the tree a thorough "house-cleaning." It should be applied any time after the leaves drop in Autumn and before the buds start in the spring. Needs only to be diluted with cold water and it is ready to apply. 1 gallon makes 10 gallons of spray. Guaranteed under the National Insecticide Act. 1 qt. 40 cts., weight 3 lbs.; 1 gal. 75 cts., weight 12 lbs.; 5 gals. \$2.25, 10 gals. \$4.00, 25 gals. \$6.50, 50 gals. and large quantities write for special price, stating quantity required.

NICOTICIDE FUMIGATING COMPOUND. For killing all kinds of insects on plants in greenhouse and frames. Sold in cans as follows: Gal. \$15, ½ gal. \$8.25, per qt. \$4.50. No. 1, 1 pt. sufficient for 32,000 cubic feet of space. \$2.50. No. 2, ½ pt. \$1.25.

NICO-FUME. A tobacco paper for fumigating greenhouses; furnishes the easiest method of fumigation ever devised. Send for circular. Cans of 24 sheets, \$1.00, 144 sheets \$4.50, 228 sheets \$8.50.

DRY ARSENATE OF LEAD POWDER. Can be used dry or by adding water to the dry powder. Can be used as a spray. Price, per lb. 35 cts.

PARIS GREEN. A poisonous, insoluble powder for preventing the ravages of potato bugs, codling moth, caterpillars, slugs and bugs. Mix one pound to 100 pounds of plaster, or 200 gallons of water. May be used clear with the Leggett Gun.

BOWKERS TRADE MARK PYROX SECURED KILLS AND CURES

Pyrox kills all leaf-eating insects and prevents disease.

It serves the purposes for which two mixtures were previously used. It is no experiment; it was introduced in 1898. It is a creamy paste that looks like paint, is easily mixed with cold water, and sticks like paint to the foliage. It won't wash off.

Bowker's Pyrox is a combination of arsenate of lead and Bordeaux. It is a mixture with reliability and brains behind it; a mixture with laboratory and field experience to support it; a mixture made by careful methods in a modern plant under expert supervision. Such a combination costs more to make and is worth more to buy because of the insurance the name affords against haphazard preparations.

It won't wash off. If it were not for the new growth coming along, as is usually the case with shade trees, fruit trees, shrubs, potato vines, etc., and which, of course, must be protected, one spraying would be enough for the season.

Price, 1 lb. (not mailable), 25 cts., 5 lbs. \$1.00, 10 lbs. \$1.75, 25 lbs. \$4.00, 50 lbs. \$7.50, 100 lbs. \$13.50. 200 pounds or more, special price on application.

Always select a clear day for spraying your fruit.

ROSE BUG DESTROYER. It is highly concentrated and is diluted with water according to the purpose. Full directions for use with each package. Small bottle 50 cts., large bottle \$2, case of six bottle \$10, keg, containing one gallon, \$4, keg containing five gallons \$17.50.

SCALECIDE. A petroleum oil that mixes at once with cold water in any proportion and stays mixed. It is not necessary to use an extra tank or barrel and no hot water should be used. Can be prepared in an instant, adding one gallon of Scalecide for every fifteen or twenty gallons of water. Qt. can 40 cts., weight 3 lbs.; gal. can \$1, weight 9 lbs.; 5-gal. can \$3.25, half-bbl. (30-gal. tin) \$15, bbl. (50 gals.) \$25.

SLUG-SHOT. A fine powder used for potato bugs and other insects. Recommended for cabbage worms. 5-lb. packages 35 cts.

SOAP, SULPHO-TOBACCO. 3-oz. pkg. 10 cts., mailed postpaid 13 cts., per doz. \$1, ½-lb. pkg. 20 cts., mailed postpaid 28 cts., per doz. \$2.

FISH OIL SOAP. For destroying insects on plants, etc., in small boxes. Lb. 15 cts., 5 lbs. 75 cts.

TREE TANGLEFOOT

A perfect safeguard for trees against gipsy, brown-tail and tussock moth, canker worms, ants, and all creeping things. It will remain sticky about three months, fully exposed to the weather. Lb.-can, 35 cts., 3-lb. can \$1.00, 10-lb. can \$3.00, 20-lb. can \$5.50, 25 lb. pail, \$6.75.

COAL TAR. In quart tin boxes. For tarring corn to prevent crows from pulling it. Per pt. 15 cts., qt. 25 cts. Shipping weight 2 lbs. and 4 lbs.

PINE TAR. Used in the stable for cuts and bruises. Pint cans 20 cts.

TOBACCO STEMS. Indispensable for fumigating greenhouses and conservatories; for destroying aphids; should be dampened before using, and use a small handful on some dry shavings, and light it. 100 lbs. \$2.

TOBACCO DUST. Kills Green- and black-fly, etc., if dusted on when the plants are moist.

Also good to mix in the soil to destroy ground insects. 5 lbs. 25cts., 50 lbs. \$1.15, 100 lbs. \$2. FUMIGATING TOBACCO. Pure tobacco ground very fine. Prepared especially for fumigating. Per 100 \$2.50.

GRAFTING WAX. ¼ lb. 10 cts., ½ lb. 15 cts., 1b. 25 cts.

STICKY TREE CORD. For banding trees, etc., to prevent ascent of caterpillars, gipsy and brown tail moths and other injurious insects.

STICKY FLY STRING. The neatest and most effective fly catcher ever devised.



Three Sterling Preparations for the Gardener

"READEANA"

ROSE BUG EXTERMINATOR

A most effective insect killer that is absolutely harmless to even the most delicate flowers or foliage.

As a killer of insects of every kind, from the hardy Rose Bug to the destructive Caterpillar, there is nothing on the market to equal it.

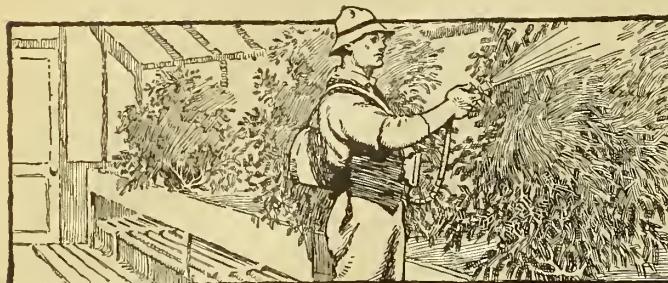
It is very economical to use as it is sent out highly concentrated, and may be diluted with from twenty to sixty parts of water.

It is not a chemical but is made up of vegetable matter, making it harmless to flowers or foliage. It will put new life into flowers and plants, as it has a brightening effect on the same.

Put up in the following size packages:

4 oz.....	\$.25	$\frac{1}{2}$ Gallon.....	\$ 2.25
8 oz.....	.50	5 "	4.00
1 quart.....	1.35	5 "	17.50
10 gallons.....	\$34.00		

Full directions accompany each package.



"ELECTRIC" WORM ERADICATOR

Cleans roots of trees, plants, flowers, vegetables, etc., of worms, grubs and insects of every kind.

This preparation is designed for use on the roots of plants only, not the foliage. Used as directed by us, it is perfectly harmless to the most delicate roots.

From one to two ounces to each gallon of water brings worms, grubs, etc., to the surface of the ground within a few seconds, where they die.

Much damage is often done to plants and the true reason never known, for the destructive work is being done at the roots where it is not perceptible. An application of "Electric" Worm Eradicator will greatly improve such plant, it being a fertilizer as well as a worm killer.

4 oz.....	\$.25	1 gallon.....	\$ 4.00
8 oz.....	.50	5 "	17.50
24 oz.....	1.00	10 "	34.00

Full directions accompany each package.

"HERBICIDE"—THE WEED EXTERMINATOR

Kills grass and weeds of every kind on roadways, gutters, tennis courts, etc., by one application.

Keeping roads and gutters free from weeds is an endless task when ordinary means are employed, for it is practically impossible to get the roots out, so it is only a matter of a few weeks before new tops are flourishing and it is necessary to go over the ground again.

One application of "Herbicide" when diluted with forty times its bulk of water kills both tops and roots of grass and weeds of every kind, and also prevents the growth of further crops by its sterile effect on the ground.

Its use will save much labor and expense in the long run.

1 quart cans.....	\$.50	5 gallon cans.....	\$ 5.50
$\frac{1}{2}$ gallon cans.....	.80	10 " cans.....	10.00
1 " "	1.50	25 " cask.....	21.50
2 " "	2.75	50 " barrel.....	35.00

Full directions accompany each package.

Nico-fume Paper or Aphis Punk

This fumigating paper is guaranteed to contain about 22% Nicotine and is composed of Nicotine, Wood Pulp and Chemicals which control the flame. It is the easiest to use of any of the fumigating compounds, with very little labor. To use, simply unroll the package, light the bottom part of the paper and put this into some receptacle like a tin can, with holes punched near the bottom. The idea is to fumigate without flame. These papers should be placed at an equal distance from each other in the house and the house should be tightly closed during the fumigating and for two or three hours afterward. To use this most economically and to get the best results, the atmosphere of the house must be very moist. We have this put up in air-tight receptacles as follows:

24 sheets 18 x 6.....	\$.85
144 " 18 x 6.....	4.00
288 " 18 x 6.....	7.50
12 " 33 x 6.....	.60
144 " 33 x 6.....	6.50

"Nico-Fume" Liquid

NICOTINE SOLUTION

Has the Advantage of being Suitable BOTH for Spraying and for Fumigating Purposes.

For fumigating, the usual methods of vaporizing the Liquid are by means of lamps or hot irons, or by painting or pouring the Liquid on the heating pipes—the Liquid being easily poured on the pipes by means of an oil-can with a long spout, such as is used on locomotives. By soldering a wire hook on the end of the spout the spout will not slip off the steam pipes, thus preventing waste of liquid.

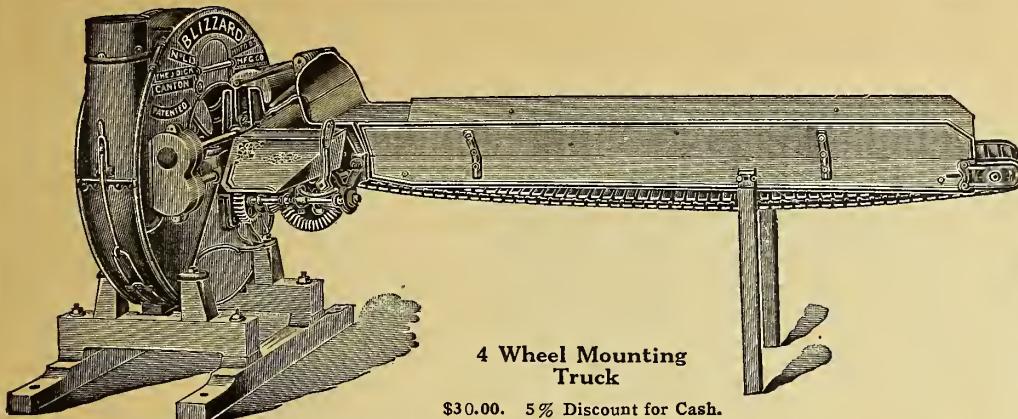
"Nico-Fume" Liquid is packed in screw-top cans, and is sold in the following sizes:

Can containing 8 pounds, price.....	\$10.50
Can containing 4 pounds, price.....	5.50
Can containing 1 pound, price.....	1.50
Can containing $\frac{1}{4}$ pound, price.....	.50

PROTECT YOUR TREES AGAINST RABBITS, MICE AND BORERS

In the Spring of the year or in Fall paint the trunks for about 6 inches above the ground with pure "Sulfocide," if the bark is too rough to paint spray with "Sulfocide" 1 to 2 parts of water, the stronger the application, the longer it will be effective. Do not replace the earth until the "Sulfocide" has had time to dry thoroughly. When once dry, cold water will not readily wash it off. Prices, 1 qt. \$1.00; 1 gal. \$2.00; 5 gal. \$7.50; 10 gal. \$12.50.





4 Wheel Mounting Truck

\$30.00. 5% Discount for Cash.

Length of knives	Capacity	Power H.P.	Speed	Weight	Price with 28 ft. Pipe and Angle deflector
L9-11½"	4-6 tons	3½-5	900-1100	700	\$110.00
L11-14"	5-8 "	4-7	800-1050	1100	125.00
M13-16"	7-12 "	7-10	650-1000	1300	152.00
M15-18½"	9-14 "	8-12	600-900	1500	185.00

Extra pipe for above in 2, 4 and 10 ft. lengths at 50 cts. per foot. Angle joints, 90 cts. each.

BLIZZARD BLOWERS with Traveling Table (287)

This illustration shows the latest pattern Blizzard Cutter and Blower with self-feed table. The endless apron is composed of two steel chains on which are riveted hardwood slats. These chains are propelled and travel over sprocket wheels secured to a separate shaft directly in the rear of the lower feed roll. The bearings on this shaft are made adjustable, to take up the wear on the drive. The lower feed roll and the travelling table are driven from the same shaft, each by its own sprocket wheel and chain. This device reduces the strain on the drive chain to a large extent. This machine can be operated successfully with a smaller amount of power than any similar cutter on the market.

The Harder Silo (288)

The American dairyman is too well informed to longer doubt that the profit of his business is dependent largely upon the contents of a silo, for he recognizes the fact that in order to make good he must use the returns from his farm.

The Harder silo stands in a class by itself and is the only one recommended by state and dairy authorities the country over. The rigid, strong door frame not only adds to the stability of the silo, but affords absolutely tight doors, which is necessary for all silage, and a continuous ladder. This ladder feature is a valuable addition to the Harder Silo and is not used in connection with any other. It is safe, strong, rigid and affords ample room for a sure footing. The mill work and general construction of all these silos is perfect. Every stave, no matter whether for an 8- or 25-foot silo, is built for that particular silo and has just the correct bevel with a heavy half-inch tongue and groove. As every piece is marked, there is no trouble whatever in putting up one of these silos.

Send for complete price list.

Improved De Laval Cream Separators (290)

The Standard Separator. A Money Maker for Any Farmer.

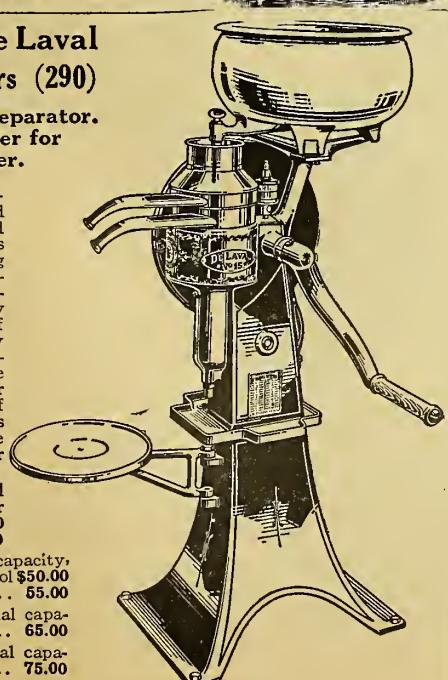
De Laval Cream Separators are guaranteed to be as represented and to fulfil all the claims made for them, being sold subject to the guarantee of their unqualified superiority in every material feature of separator practicability inclusive of the production of a greater value of cream and of a greater quantity of butter of better quality than is possible through the use of any other separator or creaming system.

Improved No. 4, actual capacity, 135 lbs. per hour, no stool. \$35.00
With stool..... 40.00

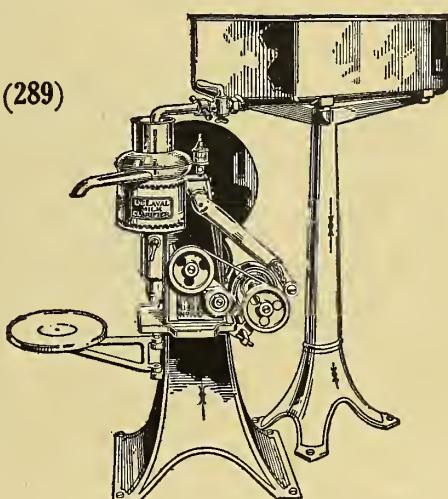
Improved No. 5 actual capacity, 200 lbs. per hour, no stool \$50.00
With stool..... 55.00

Improved No. 10, actual capacity, 335 lbs. per hour... 65.00

Improved No. 12, actual capacity, 450 lbs. per hour... 75.00



De Laval Centrifugal Milk Clarifier (289)



The De Laval Centrifugal Milk Clarifier thoroughly cleanses milk of all objectionable matter it may contain, whether in the milk as it comes from the cow or which gets into it in some manner when milking or afterward, and there is an important difference between the clarifier and the separator, in the case of market milk, in that absolutely no separation of the butterfat and other parts of milk takes place.

No.	Capacity per Hour	Price
95	100 lbs. (hand driven).....	\$ 75.00
98	500 " (hand driven).....	125.00
99	500 " (turbine driven).....	125.00
100	1,000 " (including combined hand gearing and Universal Drive, and 25 gallon supply tank and stand) ..	200.00
101	1,000 " (turbine driven).....	200.00
105	2,000 " (belt driven).....	400.00
106	2,000 " (turbine driven).....	400.00

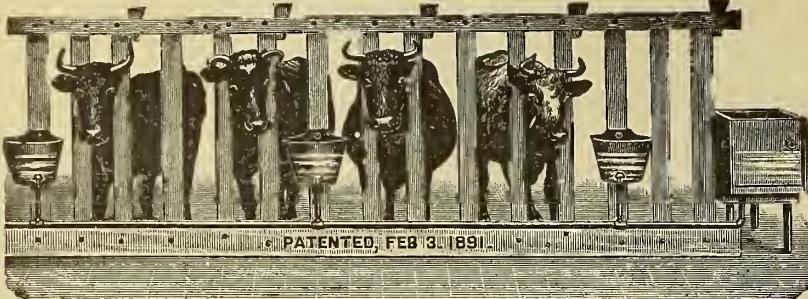
Universal Drive for No. 95 or 98 machine, extra..... 10.00

De Laval Separator Prices (continued)

Improved No. 15, actual capacity, 675 lbs. per hour.....	90.00
Improved No. 17, actual capacity, 900 lbs. per hour.....	110.00
Improved No. 19, steam turbine, actual capacity, 675 lbs. per hour.....	100.00
Improved No. 20 steam turbine, actual capacity, 900 lbs. per hour.....	125.00

Send for complete catalogue.

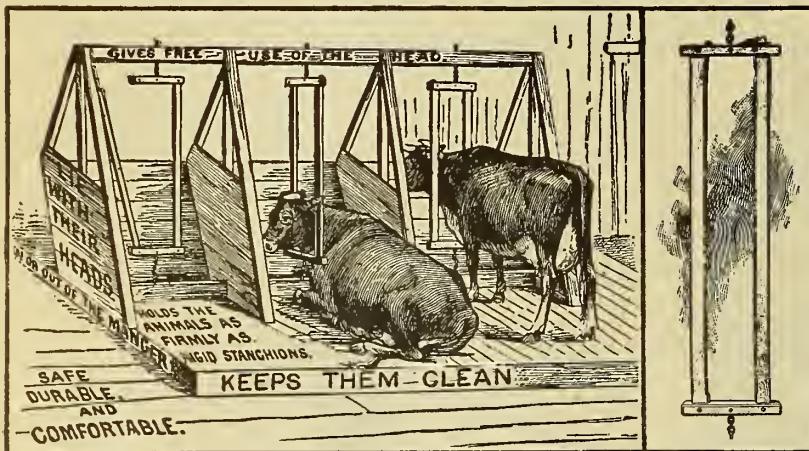
Buckley's Patent Watering Device for Watering Stock in Stables (291)



Water where cattle can get at it anytime during the day or night is a necessity in every first-class stable. With the Buckley Basins the water is always there and at the proper temperature. These basins are furnished both with and without valve. The valve is arranged at the bottom to allow the water to flow in from the supply tank and closes when filled which prevents sediment from getting into the pipe.

Price without valve \$1.00 each. With valve \$1.25 each. Weight 18 lbs.

Warriner's Patent Chain Cattle Stanchions (292)



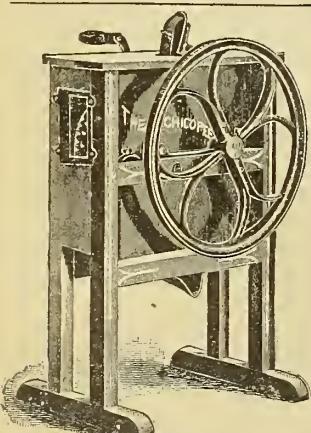
These Fasteners are in use in a large number of stables and give universal satisfaction. The cut shows the device: a short chain secures the fastener to the top beam so that it suspends 1½" clear of the bottom sill. It is also fastened to the bottom sill by a chain to allow it a free and easy motion and rotation, giving the cattle freedom, yet be securely fastened. It keeps them clean and gives liberty of action. Price, each, \$1.25. Doz. lots, \$1.15 each.

The Chicopee Corn Sheller (293)

has hard wood frame well mortised and painted, large hopper adjustable to all sizes of ears, heavy fly wheel, separator which separates the ears from the shelled corn, and chaff sieve.

Can be furnished with pulley which bolts to fly wheel.

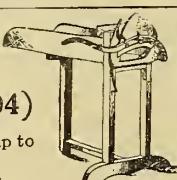
Price, \$8.50



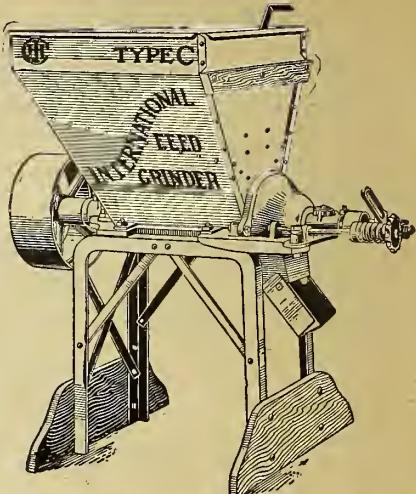
The Rich Lever Cutter (294)

The best lever cutter made. Knife always up to its place.

Price No. A \$4.50, No. B \$4.85, No. C \$5.25.

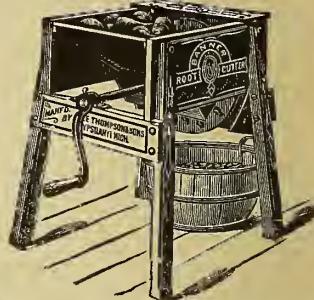


International Feed Grinder (295)

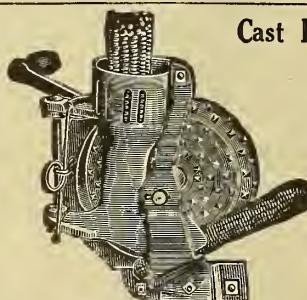


For grinding all sorts of feed for stock, such as corn on the cob, oats, barley, Kaffir corn, etc. Can be driven with two to eight horse-power. Capacity depends upon power used. With sack elevator, the feed can be placed in sacks as ground. Price without elevator, \$30; grinder and elevator complete, \$42.

The Banner Root and Vegetable Cutter (296)



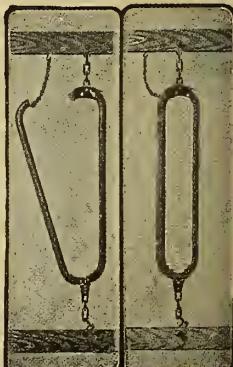
The "Banner" root cutter contains features found in no other machine. It has a self-feeder; separates the dirt from the cut feed and leaves the cut food in such condition that the stock cannot choke. Price, No. 20, hand power, capacity 30 to 50 bushels an hour, \$10. No. 15, hand or power, \$11.00.



Cast Iron Hand Corn Sheller (297)

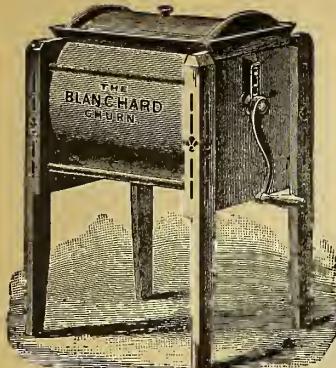
For convenience and general utility this little corn sheller will be found one of the handiest tools imaginable. It is so simple that there is absolutely nothing about it will not break. Net price, \$1.50. Discount for cash, 25 cts. Weight 15 lbs.

The Foster Steel Stanchion (298)



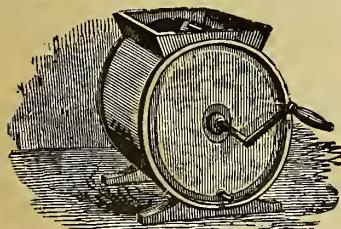
A Few Special Features of Foster Stanchions
Side bars of best U-Bar Steel, castings of malleable iron. The top lock operates easily, but when closed it is impossible for cattle to open; the top lock is protected by a strong housing with flanging sides which guide side bar so it cannot fail to close in proper place, also keeps hay and straw from getting into the lock; the top and bottom chains allow cattle to turn head, and lie down and get up with perfect comfort; the stay chain is also a special convenience, holding the side bar in readiness for closing. For appearance, workmanship, durability and ease of operation, these stanchions are unmatched. Price, all steel \$1.75 each; price, all steel, wood lined, \$2 each; price, all steel, galvanized, \$3; price, all steel, galvanized, wood lined, \$3.25.

THE BLANCHARD CHURN (299)



Has retained its reputation for over twenty years as being the best revolving dash churn made for ease of operation and superior butter-making qualities. Factory sizes quoted on application.

No. 3. Churns 2 gal.....	\$ 6.00
No. 4. Churns 4 gal.....	7.00
No. 5. Churns 8 gal.....	8.00
No. 6. Churns 12 gal.....	10.00
No. 7. Churns 16 gal.....	12.00



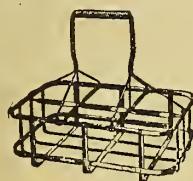
VARNISHED CYLINDER CHURNS (300)

Designed for those having a small dairy.
No. 1. List price, \$2.50. Disc. for cash, .50
Weight 15 lbs.
No. 2. List price, \$3.00 Disc. for cash, .50
Weight 17 lbs.
No. 3. List price, \$3.50. Disc. for cash, .50
No. 4. List price, \$4.00. Disc. for cash, \$1.00
Cedar, same as above, 25 cts. extra. They
are well worth the difference.



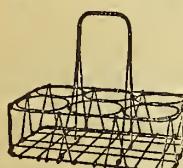
DAIRY SCALE (301)

Graduated in 1 oz., weighs 30 lbs. Made especially for dairymen. Has adjustment for taking out weight of bail. Price, \$3.50. Weight 4 lbs.



FLAT WIRE BOTTLE CARRIER (302)

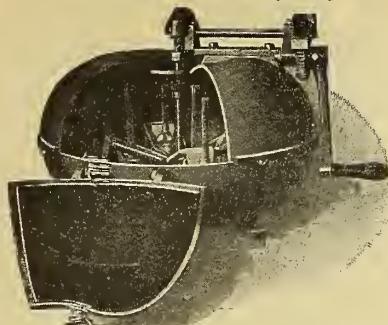
New Style and Improvement. 6 1-qt. Bottle Carrier, 85 cts. Wght. 3 oz. 8 1-qt. \$1.



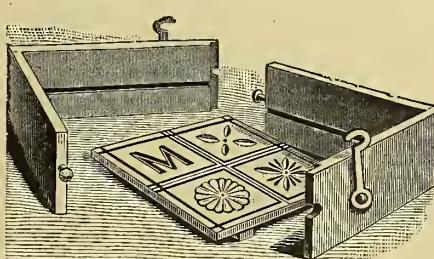
WIRE BOTTLE CARRIER (303)

6 1-qt. Bottle Carrier, 75 cts.
4 1-qt., 2 pt. Bottle Carrier, 75 cts.
4 1-qt. Bottle Carrier, 60 cts. Weight 3 oz.

20th Century Babcock Hand Milk Tester (304)



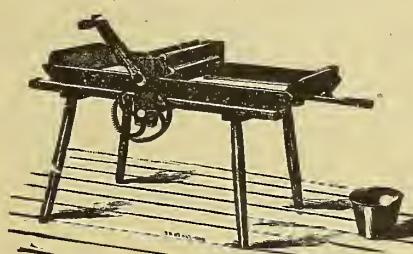
	Price	Discount.
6-bottle	\$ 9.00	.45
8-bottle	10.00	.50
10-bottle	12.00	.75
12-bottle	14.00	1.00
24-bottle	25.00	1.25



BLANCHARD BUTTER MOULD (305)

Same size as No. 4 Combination.
Initial engraved 25 cts. extra. Weight 1 lb.
Prices.

One-half lb.....	\$.80
One lb.....	1.00
Two lbs.....	1.25

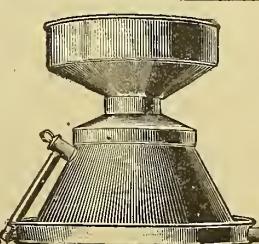


WATERS' BUTTER WORKER (306)

Capacity	Price	Capacity	Price
No. 0, 1 to 15 lbs.	\$ 6.50	No. 3, 5 to 50 lbs.	\$ 9.50
No. 1, 5 to 30 lbs.	7.50	No. 4, 10 to 80 lbs.	11.50
No. 2, 5 to 50 lbs.	8.50		

THE IDEAL MILK COOLER (307)

The Ideal Milk Cooler and Aerator does what no other cooler does, namely, thoroughly cools the milk and at the same time aerates it perfectly, so that it is ready to ship or peddled at once. No time is lost in stirring morning's milk and getting it ready for customers, as it is cooled as fast as milked.
No. 2. Suitable for 10 to 15 cows. List price, \$6.00.
No. 3. Suitable for 25 to 40 cows. List price, \$7.00.
Discount for cash, \$1.00.



THE STODDARD CHURN (308)

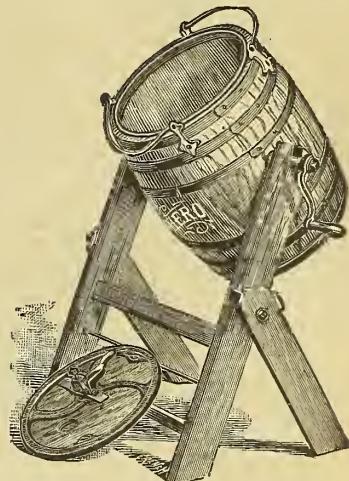


The Stoddard Churn is made by hand in the most thorough manner and of kiln-dried white oak. It will last for years. The principle's concussion, not friction—has no float nor paddle inside. It is easily operated, easily cleaned.

Prices—Dairy Size.

	List Price	Disc't for Cash
No. 1 ten gallons.....	\$ 10.00	\$ 1.00
No. 2 fifteen gallons.....	11.00	1.00
No. 3 twenty gallons.....	12.00	1.25
No. 4 twenty-five gallons.....	16.00	1.50
No. 5 thirty-five gallons.....	18.00	1.75
No. 5½ forty-five gallons.....	22.00	2.00
No. 6 sixty gallons.....	26.00	2.50

THE HERO BARREL CHURN (309)

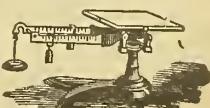


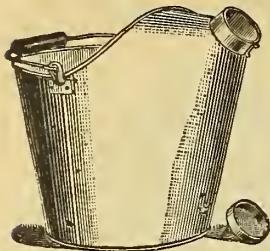
	List Price	Net Price
No. 0, 6 gallons.....	\$ 8.00	\$ 4.00
No. 1, 10 gallons.....	8.50	4.50
No. 2, 15 gallons.....	9.00	5.00
No. 3, 20 gallons.....	10.00	5.50
No. 4, 25 gallons.....	12.00	6.00
No. 5, 35 gallons.....	16.00	8.00
No. 6, 45 gallons.....	23.00	11.50
No. 7, 60 gallons.....	26.00	13.00

This Churn is made of the best oak timber, has patent adjusting fastener for cover.

FAIRBANKS' DAIRY SCALES (310)

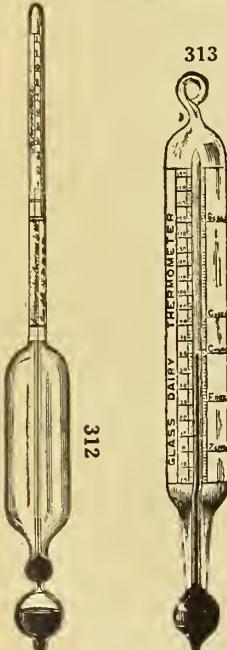
Indispensable for the dairy; has porcelain top; weight from $\frac{1}{4}$ oz. to 25 pounds.
Net price, \$3.00.





**Common
Sense
Milk Pail
(311)**

This pail is made of extra heavy tin. The strainer can be removed to clean or repair, and it is the best pail for all purposes made. Price, \$1.25. Weight 4 lbs.



LACTOMETER. (312) For testing gravity of milk. Price, 65 cts. each.

COMMON DAIRY THERMOMETER. (313) Graduated for dairy use. Price, 25 cts.

FLOATING DAIRY THERMOMETER. (314) With bulb always upright. Price, 50 cts., postpaid.



**The New
Dover
Sanitary
Milk Pail
(315)**

The Breast on our Pail has a guard which absolutely prevents dirt from falling from the breast into the pail. Capacity 14 qts.; diameter bottom, $9\frac{1}{8}$ in.; diameter top, $12\frac{1}{4}$ in.; extreme height, $13\frac{3}{4}$ inches. Shipping weight 6

Net weight $4\frac{1}{4}$ lbs. each. 1 lbs. each. Price \$1.25 each.

MILK CANS (317).

No. 3—2-band, $8\frac{1}{2}$ quart. Per doz. \$8.50, per 100 \$70. Wt. 5 lb

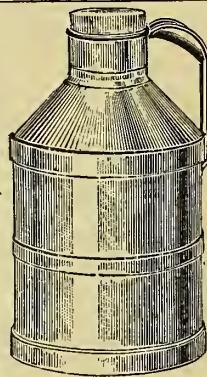
No. 2—3-band, $8\frac{1}{2}$ qt. Per doz. \$9.00; per 100, \$72. Wt. 6 lbs.

Either of the above, 25 at 100 rate with name plate without extra charge.

THE HEALTH MILK BOTTLE CAPS (318)

All caps, other than the Health Cap must be removed with a fork, knife or some sharp instrument.

They cannot be removed with the thumb and finger. When once released the old-style cap is almost invariably



thrown away, leaving the contents of the bottle exposed to odors, and in no way meeting the objectionable features of an open receptacle. It will fit any standard milk bottle. It makes sealing and opening of bottles easy. Bottles can be

kept sealed at all times. Keeps milk free from all odors. It is the most convenient cap on the market.

Prices:

Per M.	10 M lots	Bbl. (50,000)
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Health.....	\$.40	\$3.40	\$15.00
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370.....	.25	2.30	8.75
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Flipper.....	.25	2.30	8.75
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Weight 3 lbs. Barrel lots printed, no extra charge.

CLOSED.

Kept sealed at all times. Keeps milk free from all odors. It is the most convenient cap on the market.

Prices:

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CLOSED.

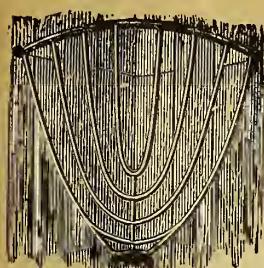
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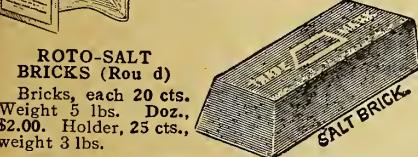
Corner Rack (324)

Price, cast-
iron, \$1.25;
wrought iron,
\$1.50. Wrought
is much better.



Cattle and Horse Salt Feeders (326)

This method of feeding
pure salt to stock has been
adopted in the largest stables
and grows in favor daily.
Salt brick, 20 cts. each; weight
5 lbs. each: \$2 per doz. Salt
brick holders, 25 cts.
Weight 3 lbs.



**ROTO-SALT
BRICKS (Round)**
Bricks, each 20 cts.
Weight 5 lbs. Doz. \$2.00.
Holder, 25 cts.,
weight 3 lbs.



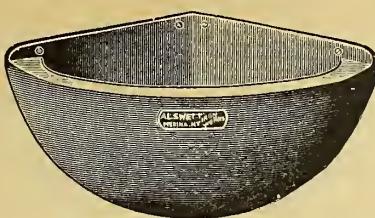
Axle Grease (327)

Snowflake Grease, once used, always used. Convenient and handy. 1-qt. can 25 cts., each, weight, 2 lbs.; 2-qt. can, 50 cts., each, weight 4 lbs.; 4-qt. can, 75 cts., each.



Small's Calf Feeder (328)

The original calf feeder. Price \$2.50. Weight
4 lbs.

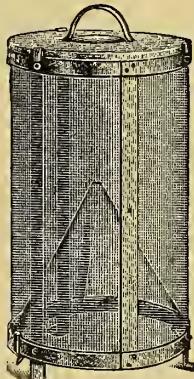
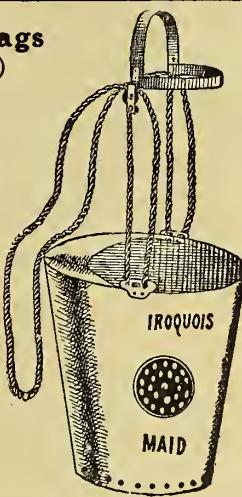


Cast Iron Feed Box (325)

Price, \$1.25. Weight 31 lbs.

Feed Bags (325A)

Price, 40 cts.,
60 cts., 70 cts., 80
cts. and 90 cts.,
according to size.
Weight 3 lbs.



Rittenhouse Out-Door Fly Trap (329)

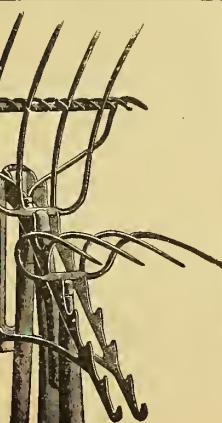
Is 19 inches high and
11 inches in diameter.
The framework is gal-
vanized sheet metal
covered with black
painted wire cloth.

One of the best traps
yet invented for rid-
ding the stable of flies.

Price \$1.00 each

HAGER TOOL RACK (330)

Designed for store
or stable. Made
in three styles for
shovels, hoes or
forks. Combination
racks for stores
can be used for all.
Price, 50 cts., each, \$5 per
doz. Discount for
cash, 5%. Weight
3 lbs.



Lanterns (331)

Will give a good light
and are absolutely safe to
carry.

No. 2, Cold Blast. Price,
90 cts. Weight 3 lbs.

No. 2, Dash, 75 cts.;
No. 2, Dash, \$1; Cold Blast
Dash, \$1.15. Weight 3 lbs.

No. 0, Side Spring, 50
cts.; No. 2, Side Spring,
75 cts. Weight 3 lbs.

No. 0, Clipper, 50 cts.;
No. 2, Clipper, 75 cts.
Weight 3 lbs.

Milkmen's and Doctors,
Driving Lanterns. No. 18,
Jap., \$2.50; No. 18, Nickel,
\$.3. Weight 3 lbs.

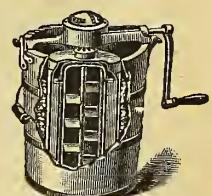
Lantern Globes, No. 0,
10 cts. each; No. 2, 10 cts.
each; Bull's Eye, 15 cts.
each. Weight 1 lb.



Bull Rings (332)

Price, copper, 2½-in. 20 cts., 3 in. 25 cts., post-
paid. Cannon metal, heavy 3 in., \$1.25.

White Mountain Ice-Cream Freezer (333)



	Net Price	Weight	Net Price
2-qt.....	\$ 2.00	13 lb.	10-qt..... \$ 5.50
3-qt.....	2.25	15 lb.	12-qt..... 7.00
4-qt.....	2.65	17 lb.	15-qt..... 8.50
6-qt.....	3.25	20 qt.	20-qt..... 10.75
8-qt.....	4.50	25 qt.	25-qt..... 13.50



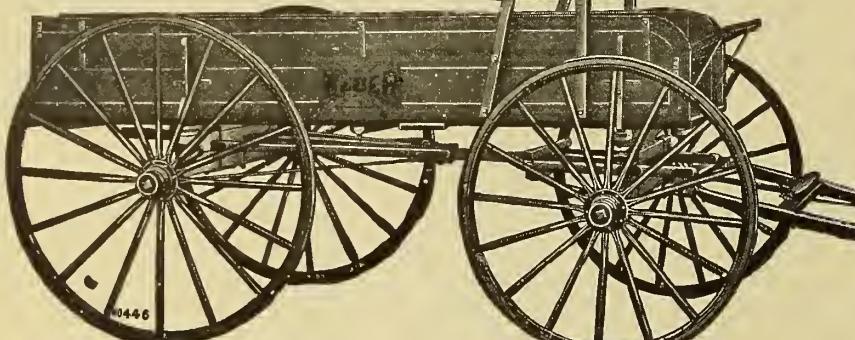
The Hustler Ash Sieve (334)

Rightly named, for it does the work in half the
time with no dust or noise and with very little work.
No. 1 Family size..... \$ 3.75
No. 2 Large furnace size..... 6.00
No. 1 Complete with galvanized ash can 5.25

Galvanized Ash Cans, 18 x 26, never rust, with
cover, \$2.50.

WEBER ONE-HORSE WAGONS (336)

Equal in quality to the two-horse, same high grade material is used throughout. This wagon is fitted with high body and seat. The wheel has $2\frac{3}{8}$ in. tires, made to stand any amount of use. Front wheels 40 in., rear wheels 48 in. This wagon always gives satisfaction. Price, \$70. 5% discount for cash.

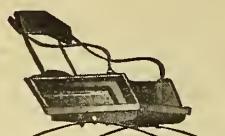


FARM TRUCK (338)

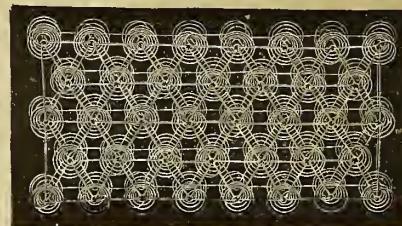
A handy farm truck with low steel wheels. Can be used for logging or any other farm work. This truck has extra long, well braced rear rounds and wood front hounds, fitted with a heavy cast reach plate. The axles and bolsters are made of hardwood, either oak, hard maple, or rock elm. The bolster stakes are mortised into the bolster, are ringed for tying or binding, and all are well ironed. The wheels are of the best French and Hecht with grooved tires, 9-16 inch spokes. The wood work is painted red with black striping and green wheels. Price, \$34.00. 5% off for cash.

This truck furnished with a 10-ft. double body, Comstock end, standard width, \$18.50. Seat, if wanted extra, \$3.50.

This wagon is made with wide track which is the standard width for New England.

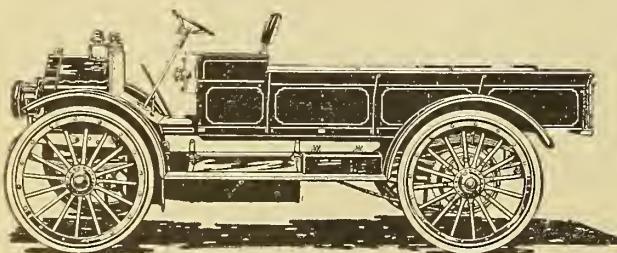
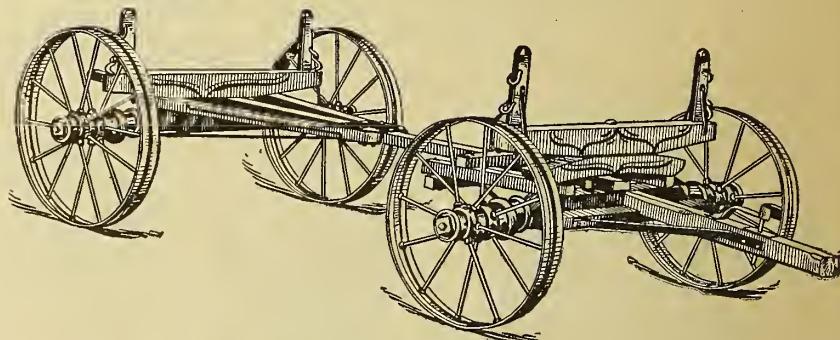


STEEL WIRE SPRING CUSHIONS



Size	Price
Mowing Machine.	\$1.25
14" x 15½" Single Seat	1.25
14" x 19"	1.25
14" x 22"	1.75
14" x 26"	2.50
14" x 28"-30"-32"	2.75
14" x 45"	3.25

Other sizes upon application.



NEW INTERNATIONAL MOTOR TRUCKS FOR 1916

	Capacity	F. O. B. Akron, Ohio
Model M A Air cooled	1,000 lbs. Solid tires	\$600.00
" " " "	1,000 " Pneumatic tires	650.00
" M Water "	1,000 " Solid tires	710.00
" " " "	1,000 " Pneumatic tires	760.00
" E " "	1,500 " Solid tires	950.00
" " " "	1,500 " Pneumatic tires	1,000.00
" F " "	2,000 " Solid tires (chassis only)	1,500.00
" " " "	2,000 " Pneumatic tires (chassis only)	1,550.00

WIARD CONTRACTORS' PLOWS

No. 69 all steel plow for all Road or Contractors' work, for tearing up cobblestones, and macadam. It can be used as a perfect Rooter and Pavement plow by simply removing the steel wing below the mouldboard, thus making a two in one plow for all round work. Special notice should be taken of the main point. This point is made from a solid bar of forged steel, $1\frac{1}{4}$ inch thick, insuring great strength. Can be reversed end for end, thereby giving double wear.

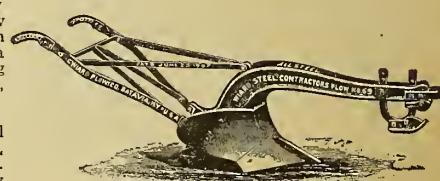
Price \$35.00. Chain attachment, \$4.00 extra.

No. 35 Swivel plow, Wood beam with long steel mouldboard. The beam, mouldboard, standard, and saddle for the mouldboard are extra heavy. As shown in the cut this plow has a large capacity and is built for heavy work where a swivel plow is required that has strength and durability. Just the plow for road builders and contractors.

Price, \$14.00. Wheel, \$1.00 extra.



NO. 35

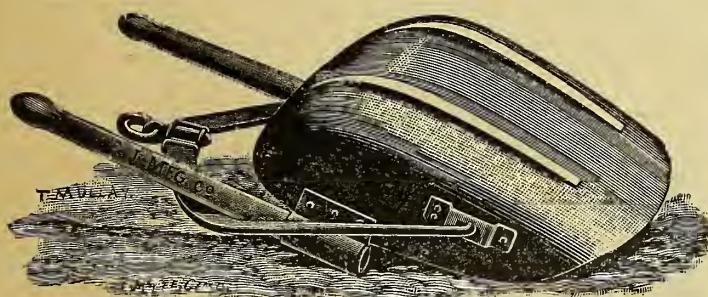


NO. 69

(339)

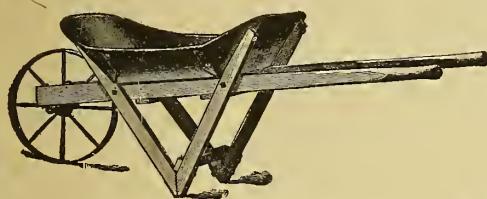
**The Following Shovels are all Ames' Make**

	Each.	Doz.	Each.	Doz.	
No. 2, Ames' Special, D. H., square,	\$1.15	\$12.00	No. 3, Atlas, D. H., round, black,	\$1.00	\$10.00
No. 2, Ames' Special, D. H. round,	1.15	12.50	No. 2, Sunnyside, D. H., square,	.80	7.50
No. 2, Our Best, D. H., square,	.90	8.00	No. 2, Sunnyside, D. F., round	.85	7.75
No. 2, Our Best, D. H., round,	.90	8.25	No. 3, 4, 5 and 6, add 5 cents each.		
No. 3, Our Best, D. H., square,	.95	8.25	No. 2, Champion Strapped Back, D. H., sq.,	.65	7.00
No. 3, Our Best D. H., round,	.95	8.50	No. 2, Champion Strapped Back, D. H., round,	.65	7.00
No. 3, Atlas, D. H., square, black,	1.00	10.00	Black finish 25 cts. per doz. less.		

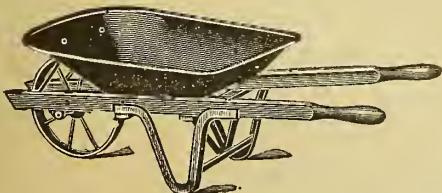
**Boss Steel Scraper with Runners (340)**

Pressed Steel Bowl

No. 0, carries 10 feet of earth	.....	\$13.00
No. 1, " 7 "	.....	7.00
No. 2, " 5 "	.....	6.50
No. 3, " 3 "	.....	6.00
No. 0, Riveted Bowl	.....	10.00

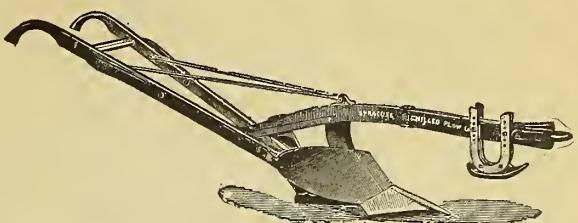
**Dump or Contractors' Favorite Barrow (341)**

Without doubt the strongest and most durable dump barrow on the market. Either wood or steel wheel. Price, wood wheel, \$2 each, \$22 per doz.; steel wheel, \$2.15 each, \$23 per doz.

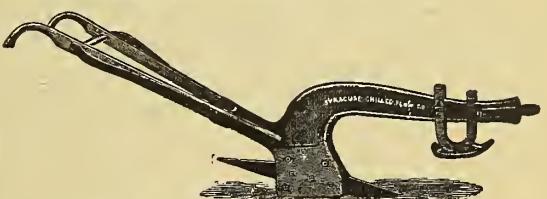
**Wolverine Angle Leg Barrow (342)**

The very best all-round contractor's barrow made. Tray pressed from one solid piece, 29 x 36 at top. Frame of hard wood and thoroughly braced and bolted. 16 in. steel wheel; tire 1½ x 5-16; ½ in. axle. Heavy rod rolled in edge. Weight, 825 lbs. per doz. Each \$3.85, per doz. \$42.

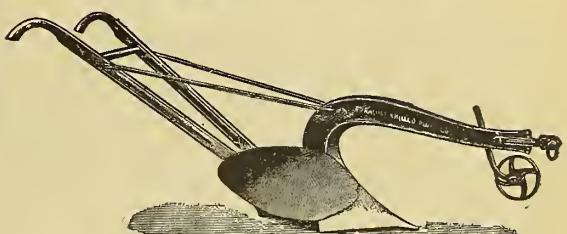
TUBULAR STEEL BARROW. (Not shown.) Tubular steel barrow, with pressed steel bowl, and steel frame; double braced and made for heavy work. 3 cu. ft. Price, \$4.50 each. \$48.00 per dozen.

Contractors' Plows Road Plow No. 99 (343)

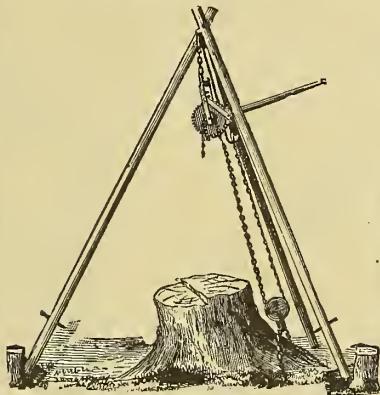
List price, \$35. Discount, 15 per cent.

Pavement Plow No. 98 (344)

List price, \$25. Discount, 15 per cent.

Grading Plow No. 1-78 (345)

List price, \$15. Discount, 15%.

Eureka Stump Puller and Rock Lifter (346)

This is by far the simplest and most efficient device on market for pulling stumps, lifting stones and handling heavy bodies, and will be found very useful. Price: No. 1, weight, 22 lbs., capacity, 4 tons, \$16. No. 2, weight, 26 lbs., capacity, 6 tons, \$17. No. 3, weight, 32 lbs., capacity, 8 tons, \$19. Giant Lifter, capacity, 20 tons, \$30. Net cash price, 10% discount from list price.

Contractors' Picks (347)

7 lb.	.....	\$ .75
8 lb.	.....	.80
9 lb.	.....	.85
6 lb.	.....	.60
7 lb.	.....	.65

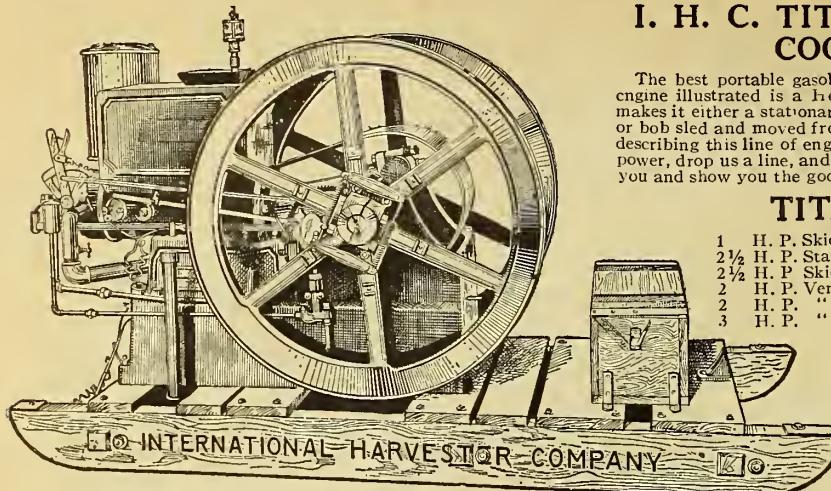


Railroad Picks



STEEL OIL TEMPERED WEDGES. (348). 6 cts. lb.

AXE MATTOCK. (349.) Indispensable for clearing up rough places. 75 cts.



I. H. C. TITAN ENGINE—With Tilting and Sliding Table Outfit

Price does not include the Saw

4 H. P. Sliding Table	\$242.00	6 H. P. Tilting Table	\$308.70
4 H. P. Tilting "	260.70	8 H. P. Sliding "	419.65
6 H. P. Sliding "	325.70	8 H. P. Tilting "	419.65

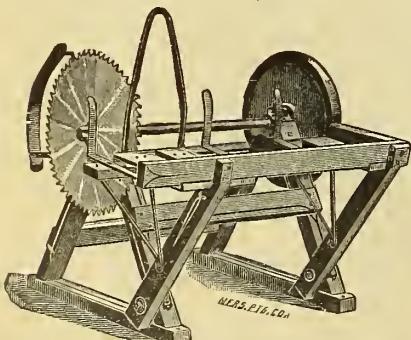
I. H. C. TITAN HORIZONTAL HOPPER-COOLED ENGINE

With Tilting Table Sawing Outfit (354)

Hopper-Cooled engines are not as liable to be injured by frost and are more easily drained than other kinds. Their lighter weight and low center of gravity makes them especially desirable for hilly country. We can furnish this outfit with either 4, 6, 8 or 10-horse engines. May be moved to use for any other purpose. The saw table is made in two styles, the right hand with table on the right and left hand with table on the left. In ordering, please state which is wanted.

Equipment: This outfit is equipped with a Magneto, muffler, oil can, can of the best gasoline engine lubricating oil, belt and steel spring seat, double trees, pole and neck yoke, friction clutch pulley. If friction clutch pulley is not wanted, deduct \$15.00.

ROSS TILTING TABLE WOOD AND POLE SAW (355)



All of the saws are made to drop wood on right-hand side unless otherwise ordered.

PRICES

	20-in.	22-in.	24-in.	26-in.	28-in.
Tilting Table					
Wood Saws	\$20.20	\$21.25	\$22.50	\$23.75	\$25.00
Tilting Table					
Pole Saws	.. 23.50	25.00	26.25	27.50	28.75
Sliding Table					
Wood Saws	22.00	23.00	24.00	25.00	26.50
Sliding Table					
Pole Saws	.. 25.00	26.50	27.75	29.00	30.25
Delivered at nearest railroad station from the factory at above prices.					
24-in. and 26-in. Tilting Table carried in stock.					

I. H. C. TITAN HORIZONTAL HOPPER-COOLED ENGINES (353)

The best portable gasoline engine made. Can be moved anywhere easily. The engine illustrated is a Horizontal Hopper-Cooled Engine mounted on skids which makes it either a stationary or portable engine. Can be loaded onto any farm truck or bob sled and moved from place to place whenever desired. A complete catalogue describing this line of engines will be mailed on application. If you are looking for power, drop us a line, and if in this vicinity we will have our engine man call and see you and show you the good points of this engine over other makes.

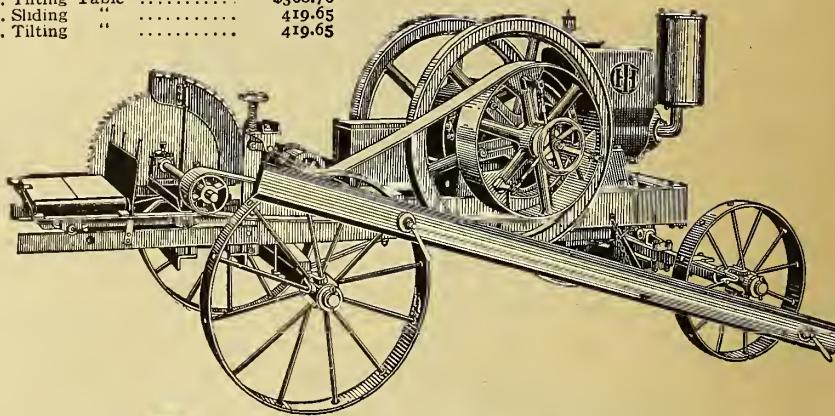
TITAN GASOLINE ENGINE

1 H. P. Skid, batteries	\$42.00
2 1/2 H. P. Stationary, Magneto ignition	96.80
2 1/2 H. P. Skid	96.80
2 H. P. Vert.	91.85
2 H. P. " skid	91.85
3 H. P. "	119.90

TITAN KEROSENE ENGINE With Magneto

4 H. P. Sta.	\$160.60	8 H. P. Port.	\$377.85
4 H. P. Skid....	166.10	10 H. P. Sta.	392.70
4 H. P. Port ...	211.75	10 H. P. Skid	397.10
6 H. P. Sta.	239.80	10 H. P. Port	455.95
6 H. P. Skid	245.85	12 H. P. Sta.	451.00
6 H. P. Port	291.50	12 H. P. Skid	456.50
8 H. P. Sta.	320.10	12 H. P. Port	514.25
8 H. P. Skid	326.15		

Portable Engines include truck and mounting.



BAG 1 OLDER. (356.) Patent Bag Holder and Funnel Combined. Is the simplest and most convenient arrangement for holding bags when being filled with grain or anything ever put in bags. \$3.50 each.

THE GOSHEN GALVANIZED TANK HEATER (357)

Adapted to either Steel or Wood Tanks. WITHOUT CUTTING HOLE in Tank or making any alterations.

Made of heavier Galvanized Steel than any other heater, on the market; consequently is much more durable.

It has no inside bolts or rods to rust out. No solder to melt. No pipes to freeze up and burst.

Not injured if water gets low in tank.

Radiates heat from its entire surface.

Burns anything. Large opening in top to feed the fire.

Bottom is cast on to the heavy galvanized sides, making no seam.

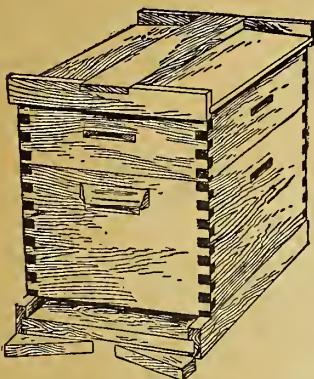
Sides made of heavy Galvanized Steel with cast iron top and bottom. Ashes can be removed without disturbing the fire.

No. 1, 21x 26 in., list price, \$7.50.

Net cash price, \$6.



Bee Keepers' Supplies



The above cut represents the Dovetailed, or lock corner hive.

We supply these hives in either eight or ten frame size, and supers to fit, taking $4\frac{1}{4} \times 1\frac{1}{2}$ beeway sections $4\frac{1}{4} \times 1\frac{1}{2}$; $4 \times 5 \times 1\frac{1}{2}$; $3\frac{1}{2} \times 5 \times 1\frac{1}{2}$ plain sections; or with shallow $5\frac{1}{2}$ inch frames for extracted honey.

ONE-STORY HIVE

A one-story hive consisting of body, bottom-board cover and Hoffman self-spacing frames. Division boards for hive bodies or $5\frac{1}{2}$ supers, not included at these prices; add price of board wanted.

	8 Frs.	10 Frs.
1 hive nailed and painted, with fdn. starters.....	\$ 2.40	\$ 2.55
1 hive, nailed and painted, without fdn. starters, each..	2.30	2.45
1 hive, nailed and painted, with full sheets fdn.....	3.30	3.65
1 hive in flat, (no fdn.).....	1.62	1.77
5 hives in flat, (no fdn.).....	7.45	8.20
10 hives in flat, (no fdn.).....	14.60	16.00

ONE AND ONE-HALF STORY HIVE.

Same as one-story, with the addition of 1 super including section-holders and sections, making $1\frac{1}{2}$ story hive.

	8 Frs.	10 Frs.
1 hive nailed and painted, with fdn. starters.....	\$ 3.60	\$ 3.85
1 hive nailed and painted, (no fdn. or sections).....	3.15	3.35
1 hive nailed and painted, with full sheets fdn.....	4.90	5.40
1 hive in flat, (no fdn. or sections).....	2.27	2.47
5 hives in flat, (no fdn. or sections).....	10.20	11.20
10 hives in flat, (no fdn. or sections).....	20.00	22.00

Prices of hives with $4\frac{1}{4} \times 1\frac{1}{2}$ sections; other size sections on application.

Notice: The above hives furnished with Colorado or Metal roofed covers and inner covers, 20 cts. extra, each.

Hives with 2 supers add price of extra super to hive.

If Division Boards are wanted add 10 cts. extra.

PRICE ON AIR-SPACED HIVES ON APPLICATION

Price List on Dovetailed Supers Taking $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ Beeway Sections.

The slotted-section super is $4\frac{1}{4}$ inches deep and includes nats, flat tins, slotted section-holders, slotted separators, followers, and springs. Furnished in either eight-frame or ten-frame size.....	Number for 8 and 10 frame.	Nailed and Painted Each.
Shallow super for comb honey in $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ beeway sections, no sections or foundation starter.....	8	.85
Shallow super for comb honey in $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ beeway sections, including sections and 1-inch foundation starters	10	.90
Shallow super for comb honey in $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$ beeway sections, including sections and full sheets foundation.....	8	1.20
	10	1.30
	8	1.60
	10	1.75

Price on other style supers supplied on application.

TIN RABBETS FOR HIVES

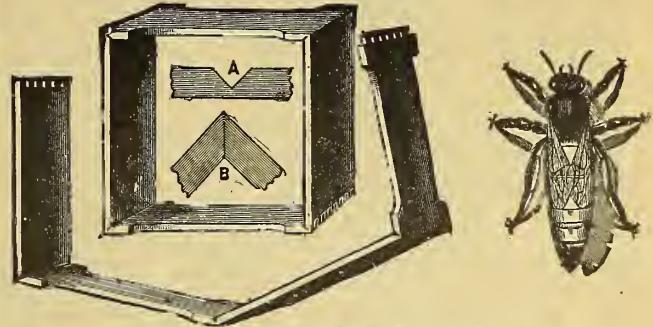
Rabbets 12 to 14 inches long for 8- and 10-frame hives. \$1.20 per hundred. Other lengths $1\frac{1}{2}$ cents per foot. 8 lbs. per 100.

PRICE LIST OF COMB FOUNDATION

GRADE	Regular Sizes	Square feet to pound	Price per pound in lots of				
			1 lb.	5 lbs.	10 lbs.	25 lbs.	50 lbs.
Light Brood.....	$7\frac{1}{2} \times 16\frac{3}{4}$ for L-frame, $9\frac{1}{4} \times 16\frac{3}{4}$ for Jumbo.....	7	\$.60	\$.58	\$.56	\$.54	\$.53
Extra Light Brood.....	frame, and $4\frac{1}{2} \times 16\frac{3}{4}$ for Shallow frame.....	9	.62	.60	.58	.56	.55
Light Section.....	$3\frac{1}{2} \times 15\frac{1}{2}$ for $4\frac{1}{4}$ sections, $4\frac{1}{4} \times 13$ for $3\frac{1}{2} \times 5$	27 to 29	.67	.65	.63	.61	.60
Extra Light Section.....	Sections, and $4\frac{1}{2} \times 14\frac{1}{2}$ for 4×5 sections.....	30 to 32	.70	.68	.66	.64	.63

Light Brood foundation for L-frames, runs 7 to 8 sheets to pound; extra, light brood, 9 to 10; light section for $4\frac{1}{4}$ sections 27 to 29; extra light section to 32. Write for prices on Foundation Mills.

"FALCON" ONE PIECE V-GROOVED SECTION



PRICES OF BEEWAY SECTIONS

Per 100, No. 1	\$.85	7 lbs.	Per 2,000 No. 1	\$ 11.00
Per 250 "	1.75	18 "	Per 3,000 "	15.75
Per 500 "	3.00	35 "	Per 4,000 "	21.00
Per 1,000 "	5.75	70 "	Per 5,000 "	25.00

Sections split three sides, 10 cents per 100, or 50 cents per 1,000 extra. For larger quantities we will quote prices upon application.

PRICES OF PLAIN SECTIONS.

Sections $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{2}$, $3\frac{1}{2} \times 5 \times 1\frac{1}{2}$, or $4 \times 5 \times 1\frac{1}{2}$ all plain, no beeway, as described above, 25 cents per 1,000 less than beeway prices. 7 lbs. per 100, 18 lbs. per 250, 35 lbs. per 500.

Sections ordered put up, \$1.50 per 100.

Sections ordered with 1-inch fdn. starters, \$2.00 per 100.

Sections ordered with full sheets fdn. \$3.00 per 100.

SUPER SPRINGS

Flat springs for slipping between inside of side of super and cleated separators or followers, 75 cents per 100, \$6 per 1,000. 2 lbs. per 100.

NICKELED STEEL HIVE TOOL.

Good for prying hive cover and frames, as well as a scraper, it will stand the strain of any ordinary work in the bee yard.

Price, 40 cents. 1 lb.

PORTER BEE ESCAPE

Bee escapes greatly facilitate the removing of honey from hives and supers. The escape is fastened to a board after making a suitable hole in same. One escape to a board is sufficient. Complete directions for using the escape are sent with each one.

Single—Price 15c each: \$1.65 per dozen, with board, 30c; \$2.70 for 10, not prepaid.

Double Bee-escape—Price 17c: doz., \$1.85 With board, 32c; \$2.90 per 10. Not prepaid.

ESTERDAY WIRE IMBEDDER Price, 25 cents; weight 5 ozs.

SPUR WHEEL WIRE IMBEDDER Price 25 cents; weight 4 ozs.

PRICE OF BROOD FRAMES

Name	Nailed 100	In Flat in lots of 10	In lots of 100	Wgt. of 100
Double grooved Hoffman.....	\$ 5.00	\$.40	\$ 3.50	50 lbs.
Double grooved, narrow end, staple-spaced.....	5.00	.40	3.20	52 lbs.
Shallow extracting (5½ in.).....	4.00	.30	2.70	35 lbs.
Simplicity.....	4.00	.30	2.70	35 lbs.
Wired and full sheets fdn.....	16.00	17 cts. each		
With 1-in. starters.....	6.00	7 cts. each		

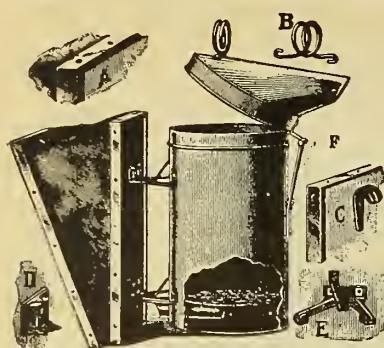
DEWEY FOUNTAIN FASTENER. Price, \$1.40, weight 3 lbs. each.

DIXIE BEE BRUSH. Price 15 cts., weight 1 lb.

GERMAN BEE BRUSH.

Price—Black bristles, 25 cts., weight 1 lb.

White bristles, 30 cts., weight 1 lb.



ROOT SMOKER

Curved nozzle, hinged to swing back, legs of malleable iron, secured by bolts.

The blast is the well-known Cornell principle.

NAME	Size of Barrel	Weight	Price of	
			1	3
Jumbo.....	4 inches	2 lbs.	\$ 1.25	\$ 3.45
Standard.....	3½ "	1¾ lbs.	.85	2.25
Junior.....	2½ "	1 lb.	.65	1.80

PRICE LIST OF BINGHAM SMOKERS

NAME	Size of Barrel	Weight	Price of	
			1	3
Smoke engine.....	4 inches	1½ lb.	\$ 1.25	\$ 3.45
Doctor.....	3½ "	1½ lbs.	.85	2.25
Conqueror.....	3 "	1½ lbs.	.75	1.80
Little Wonder.....	2 "	1 lb.	.50	1.35

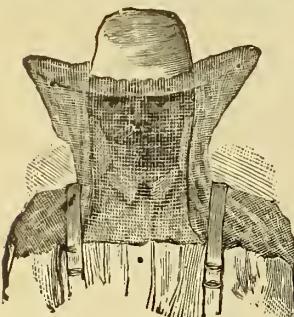
CLARK'S COLD BLAST SMOKER.

A good smoker for the money, for those with a few colonies of bees. Clark's Cold Blast, 55 cts.; three for \$1.50. Weight 1½ lbs. each.

DANZENBAKER VICTOR SMOKER.

Has a perforated side grate, which holds a removable, asbestos-backed metal fire shell, preventing burning the tin off the outer case, and deflecting the air at right angles, preventing back draft to the valveless bellows. The air, passing to the back and over the top, cools and expels the smoke, fanning the burning fuel at top or side till all consumed.

Price, 80 cts., three for \$2.00; weight 1¾ lbs. each.



MUTH IDEAL BEE VEIL

Price 65 cts.

Globe Veil, weight 1 lb.	\$ 1.00
No. 2 Cotton, silk tulle faced, weight 1 lb. ....	.60
No. 3 Cotton, tulle throughout, weight 1 lb. ....	.50

CARLIN'S FOUNDATION CUTTER.

Steel wheel, 25 cts. Weight 4 ozs.

COMB HOLDER.

This is for hooking over the edge of a hive to hang frames upon when taken from the hive for any purpose, and will be found very convenient.

Price, each 25 cts. Weight 1 lb.

PASTEBOARD BOXES OR CARTONS.

DESCRIPTION	PRICE		
	100	500	1,000
Plain, 1 cent each, 25 for 20 cents.....	\$.60	\$ 2.75	\$ 5.00
Printed 1 side, one color, name blank.....	.65	3.00	5.50
Printed 1 side, 1 color, name and address.....	1.10	3.50	6.00
Printed 1 side, 2 colors, or 2 sides 1 color.....	1.20	3.75	6.50

Weight 4 lbs. per 100.

SHIPPING CASES FOR COMB HONEY.

Shipping Cases in Flat without Glass.

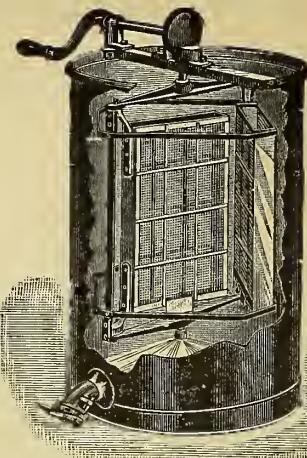
No.		10	100	PRICE	
				1 holding 24 sections, 4¼ x 1½, showing 4.....	\$ 2.00
1	holding 12 sections, 4¼ x 1½, showing 3.....	1.30	11.00	1 holding 24 sections, 4¼ x 1½, showing 4.....	1.90
3	holding 12 sections, 4¼ x 1½, showing 3.....	1.30	11.00	6 holding 24 sections, 3½ x 5 x 1½, showing 4.....	1.80
1½	holding 24 sections, 4¼ x 1½, showing 4.....	1.90	17.00	6 holding 24 sections, 3½ x 5 x 1½, showing 4.....	1.80
6	holding 24 sections, 3½ x 5 x 1½, showing 4.....	1.80	16.00	8 holding 24 sections, 4 x 5 x 1½, showing 4.....	1.80
8	holding 24 sections, 4 x 5 x 1½, showing 4.....	1.80	16.00		

Shipping Cases with Glass.

NO. AND DESCRIPTION.	Nld.	In flat, with 3 in. glass.		
		1	10	100
11 Same as No. 1.....	\$.35	\$.25	\$ 2.30	\$ 21.00
13 Same as No. 3.....	.22	.15	1.40	12.50
11½ Same as No. 1½.....	.35	.25	2.20	20.00
16 Same as No. 6.....	.30	.22	2.10	19.00
18 Same as No. 8.....	.30	.22	2.05	19.00

HIVE CARRIERS. Price per pair, 25 cts.

CROWN RAPID REVERSIBLE EXTRACTOR



The machine whose number is followed by "B" does not reverse the comb automatically, but it is easily and quickly done without removing the frame from the basket. The "BR" machines have the automatic reversing device.

PRICE LIST OF TWO FRAME REVERSIBLE EXTRACTORS

No. 15B—2 frame Cowan for L frame. Comb pockets, 9½ in. deep; diameter of can 20 in.; (weight 80 lbs.)..... \$13.00

No. 15BR—2 frame Root Automatic with brake, same size as above..... \$14.50

No. 17B—2 frame Cowan for frames not over 11½ inches deep; diameter of can 23 inches; (weight 100 lbs.)..... \$14.00

No. 17BR—2 frame Root Automatic with brake, same size as above..... \$16.50

No. 18B—2 frame Cowan for frames not over 12 inches deep; diameter of can 24 inches; (weight 120 lbs.)..... \$15.00

No. 18BR—2 frame Root Automatic with brake, same size as above..... 17.50

NOVICE HONEY EXTRACTOR.

For those who have only a few colonies to extract from, this extractor answers the purpose. It is made in four sizes as follows:
No. 5B—For L or Simplicity frame, standing on end, or any frame not over 9½ inches in depth or 18½ inches long, top bar 20 inches (weight 45 lbs.)..... \$10.00
No. 7B—For frames deeper than the L, but not over 11¾ inches deep (weight 60 lbs.)..... 10.50

WIRE ALLEY TRAPS. Each, 55 cts.; \$5.00 for ten. Weight 1 lb. each. State whether for eight or ten frame size.

ALLEY'S COMBINED DRONE AND QUEEN TRAP.

Each 50 cts.; 10 for \$4.50. Weight 2 lbs. State whether eight or ten frame size.

PORTER HONEY HOUSE ESCAPE.

This is a larger escape than the one used on supers and is designed for use in extracting rooms or any place where it is desirable to get rid of bees. 20 cts. each. \$2.25 per dozen.

TINNED WIRE.

No. 30 tinned wire is the size used for wiring frames. We can furnish it on various sized spools and in 5 lb. coils as per following table:

SIZE	PRICE
3/4 oz. spools No. 30 tinned wire.....	\$.03
1/4 lb. " " " " .....	.12
1/2 lb. " " " " .....	.18
1 lb. " " " " .....	.30
670 feet " for 100 L. frames.....	.15
5 lb. coils " tinned wire.....	1.10

PRICE LIST OF DIVISION BOARDS.

DESCRIPTION	Each	10	Shipping Wt. of 10
Plain division board, nailed.....	\$.10	.90	10 lbs.
Plain division board, flat.....	.08	.70	9 "
Super Follower.....	.05	.40	
Super division board.....	.07	.60	

NOVICE HONEY KNIFE.

Price 80 cts. Weight 1 lb. BINGHAM KNIFE. Price 70 cts. Weight 1 lb.

IMPROVED BINGHAM KNIFE. 8½ in. 75 cts., 10 in. 85 cts. Weight 1 lb.

COGSHAL BEE BRUSH.

Price, 15 cts. each. Weight 6 ozs. each.

WOOD-WIRE HONEY BOARDS.

No. 7—Ten frame honey board, \$4.00 for 10. 45 cts. each. Weight 24 lbs. per 10.

No. 8—Eight frame honey board \$3.50 for 10. 40 cts. each. Weight 19 lbs. per 10.

TABLE OF PRICES OF HONEY BOARDS.

No.	Description	Sizes in Inches	Price of Ten	Wt. per Ten
1	10 frame unbound zinc.....	14 x 19½	\$ 3.60	7 lbs.
11	8 frame unbound zinc.....	12 x 19½	3.20	6 lbs.
12	10 frame wood bound zinc.	16 x 20	4.20	11 lbs.
13	8 frame wood bound zinc.	13½ x 20	3.80	10 lbs.

WEIGHTS OF GRASS AND FIELD SEEDS AND QUANTITIES SOWN PER ACRE

	Weights.	Quantity Sown Per Acre	Weights.	Quantity Sown per Acre.
Timothy.....	Per bush., 45 lbs.	1-2 bush.	Tall Oat Grass.....	Per bush., 12 lbs.
Clover, Red.....	" " 60 "	15 to 20 lbs.	Wood Meadow.....	" " 14 "
Clover, White.....	" " 60 "	10 to 15 lbs.	Yellow Oat Grass.....	" " 8 "
Clover, Alsike.....	" " 60 "	8 to 10 lbs.	Buckwheat.....	" " 48 "
Clover, Alfalfa.....	" " 60 "	15 to 20 lbs.	Barley.....	" " 48 "
Red Top, Fancy.....		10 to 15 lbs.	Oats.....	" " 32 "
Bent, Fancy, R. I.....		10 to 25 lbs.	Rye.....	" " 56 "
Blk. Grass.....	Per bush., 14 lbs.	2 to 3 bush.	Wheat.....	" " 60 lbs.
Hungarian.....	" " 48 "	½ to 1 bush.	Flax.....	" " 56 "
Lawn Seed.....		80 to 100 lbs.	Canary.....	" " 60 "
Millet, American.....	Per bush., 50 lbs.	½ to 1 bush.	Hemp.....	" " 40 "
Millet, Golden or German.....	" " 50 "	½ to 1 bush.	Rape.....	" " 50 "
Orchard Grass.....	" " 14 "	2 to 3 bush.	Beans, White.....	" " 60 lbs.
Crested Dog's Tail.....	" " 23 "	1 bush.	Beans, Seed Wax.....	" " 60 "
Hard Fescue.....	" " 14 "	2 bush.	Beans, Soy.....	" " 58 "
Italian Rye Grass.....	" " 18 "	3 bush.	Beans, Lima.....	" " 56 "
Meadow Fescue.....	" " 15 "	2½ to 3 bush.	Beans, Scarlet Runner.....	" " 50 "
Meadow Foxtail.....	" " 8 "	3 bush.	Corn Sweet.....	" " 56 "
Perennial Rye Grass.....	" " 24 "	2 bush.	Corn, Ensilage.....	" " 56 "
Rough Stalked Meadow.....	" " 14 "	2 bush.	Corn Field.....	" " 56 "
Sweet Vernal.....	" " 11 "	3 bush.	Peas, Smooth.....	" " 60 "
Sheep Fescue.....	" " 12 "	2 bush.	Peas, Seed, Wrinkled.....	" " 56 "
Tall Fescue.....	" " 15 "	2½ to 3 bush.		1½ to 3 bush.

QUANTITY OF SEED REQUIRED TO SOW AN ACRE OF GROUND

	Quantity Per Acre	Quantity Per Acre
Artichoke, 1 oz. to 500 plants.	½ lb.	Martynia, 1 oz. to 50 feet of drill.
Asparagus, 1 oz. to 200 plants.	5 lbs.	Melon, Musk, 1 oz. to 100 hills.
Beans, dwarf, 1 quart to 150 feet of drill.	1½ bush.	Melon, Water, 1 oz. to 25 hills.
Beans, Pole, 2 quarts to 200 hills.	½ bush.	Nasturtium, 1 oz. to 50 feet of drill.
Beet, Garden, 1 oz. to 100 feet of drill.	10 lbs.	Okra, 1 oz. to 50 feet of drill.
Beet, Mangel, 1 oz. to 150 feet of drill.	6 lbs.	Onion Seed, 1 oz. to 200 feet of drill.
Broccoli, 1 oz. to 3,000 plants.	5 oz.	Onion Seed for Sets.
Broom Corn.....	10 lbs.	Onion Sets, 1 qt. to 20 feet of drill.
Brussels Sprouts, 1 oz. to 3,000 plants.	5 oz.	Parsnip, 1 oz. to 250 feet of drill.
Cabbage, 1 oz. to 3,000 plants.	5 oz.	Parsley, 1 oz. to 250 feet of drill.
Carrot, 1 oz. to 150 feet of drill.	2½ lbs.	Peas, Garden, 1 qt. to 150 feet of drill.
Cauliflower, 1 oz. to 3,000 plants.	5 oz.	Pepper, 1 oz. to 1,500 plants.
Celer, 1 oz. to 10,000 plants.	4 oz.	Potatoes.
Collards, 1 oz. to 2,500 plants.	6 oz.	Pumpkins, 1 quart to 300 hills.
Corn, sweet, 1 quart to 500 hills.	8 qts.	Radish, 1 oz. to 150 feet of drill.
Cress, 1 oz. to 150 feet of drill.	8 lbs.	Rye.....
Cucumber, 1 oz. to 80 hills.	1¼ lbs.	Salsify, 1 oz. to 60 feet of drill.
Egg Plant, 1 oz. to 2,000 plants.	8 ozs.	Spinach, 1 oz. to 150 feet of drill.
Endive, 1 oz. to 300 feet of drill.	3 lbs.	Summer Savory, 1 oz. to 500 feet of drill.
Flax, broadcast.....	½ bush.	Squash, Summer, 1 oz. to 40 hills.
Kale, 1 oz. to 3,000 plants.	4 oz.	Squash, Winter, 1 oz. to 10 hills.
Kohl-Rabi, 1 oz. to 200 feet of drill.	1½ lbs.	Tomato, 1 oz. to 3,000 plants.
Leek, 1 oz. to 250 feet of drill.	4 lbs.	Tobacco, 1 oz. to 5,000 plants.
Lettuce, 1 oz. to 250 feet of drill.	3 lbs.	Turnip, 1 oz. to 250 feet of drill.

NUMBER OF PLANTS, TREES, ETC., REQUIRED TO SET AN ACRE

Distance.	Number.	Distance.	Number.
1 foot by 1 foot.	43,560	6 feet by 6 feet.	1,210
1 1-2 " 1 1-2 "	19,360	8 " 8 "	680
2 " 1 "	21,780	10 " 10 "	434
2 " 2 "	10,890	12 " 12 "	302
2 1-2 " 2 1-2 "	6,970	15 " 15 "	194
3 " 1 "	14,520	18 " 18 "	134
3 " 2 "	7,260	20 " 20 "	103
3 " 3 "	4,840	25 " 25 "	70
4 " 4 "	2,722	30 " 30 "	40
5 " 5 "	1,742	40 " 40 "	27

WEIGHT OF VARIOUS ARTICLES

Apples.....	Per bush., 48 lbs.	Sweet Potatoes.....	Per bush., 56 lbs.
Apples, dried.....	" " 22 "	Turnips.....	" " 58 "
Barley.....	" " 48 "	Beef and Pork per bbl., net.....	200 "
Broom Corn.....	" " 46 "	Flour, pcr bbl., net.....	196 "
Bran.....	" " 20 "	White Fish and Trout, per bbl., nct.....	200 "
Corn on Ear.....	" " 70 "	Salt, per bbl.....	280 "
Corn Meal.....	" " 50 "	Lime, per bbl.....	220 "
Charcoal.....	" " 22 "	Hay, well settled, per cubic foot.....	4½ "
Coal, Mineral.....	" " 80 "	Corn, on cob, in bin per cubic foot.....	22 "
Cranberries.....	" " 40 "	Corn, shelled, in bin, per cubic foot.....	45 "
Dried Peaches.....	" " 28 "	Wheat, in bin, per cubic foot.....	48 "
Irish Potatoes, heaping measure.....	" " 60 "	Oats, in bin, per cubic foot.....	25½ "
Malt.....	" " 38 "	Potatoes, in bin, per cubic foot.....	38½ "
Osage Orange.....	" " 33 "	Sand, Dry, in bin, per cubic foot.....	95 "
Onions.....	" " 54 "	Clay, Compact, per cubic foot.....	135 "
Plastering Hair.....	" " 8 "	Marble, per cubic foot.....	169 "
Salt, Coarse.....	" " 50 "	Seasoned Beech Wood, per cord.....	5,616 "
Salt, Michigan.....	" " 56 "	Seasoned Hickory, per cord.....	6,960 "

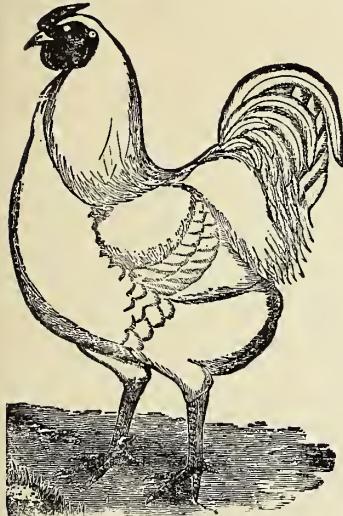
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We Sell Eggs for Hatching and BABY CHICKS



We can start you in the poultry business with either. If you haven't the facilities for doing your own hatching, we can furnish you day old chicks of the leading varieties. We can also furnish you eggs by the hundred or by the setting. The market for poultry and fresh eggs has never been supplied. New England ought to supply more of both. There is both pleasure and profit in keeping poultry. Start with any of the breeds you like best. They are all good. If you want the breed that holds the record for 1914 you will make no mistake if you start with the White Wyandottes. They are one of the best all-round breeds for both eggs and poultry. Next to these come the Rhode Island Reds and then the Columbian Wyandottes and White Plymouth Rocks.

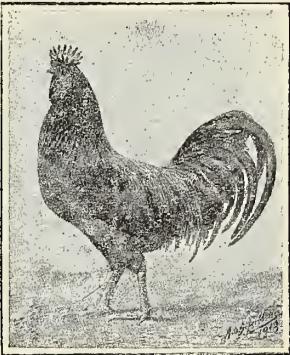
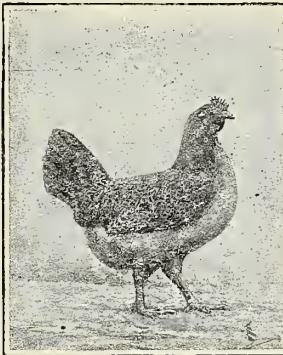
One of the latest breeds to come into the market are the Sicilian Buttercups. They are called the 300 egg breed. The name Buttercup was given it because of the peculiar markings and shape of the comb, which is unlike that of any breed, consisting of a cup-shape appendage on top of the head, resembling a buttercup flower. The light yellow with black spots on the end of each very quiet and docile and rather like company in the eighties by a sea captain who procured as the hens persisted in laying in their captivity farms in Maryland and soon proved them to lay at about the age of four months or soon Prizes on Pullets and First, Second and Third

If you want a breed for Eggs try the Sicilian or Rhode Island Reds.

If you want the best breed of Bantams that They are one of the best and most showy birds

If you cannot keep any of the large breeds, you surely can find a place for a few Bantams.

	Price of Eggs Setting of 13 Eggs.	Two Settings	For Incuba- tor 100
White Wyandottes from best pen...	\$3.00	\$5.00	
White Wyandottes from utility pen...	2.00	3.50	\$6.00
Columbian Wyandottes.....	2.00	3.50	6.00
Rhode Island Reds.....	2.00	3.50	6.00
Buttercups from best pen.....	5.00	9.00	
Buttercups from second best pen....	3.00	5.00	
Blacktailed Japanese Bantams	2.00		



will be an ornament to any yard or lawn, try the Blacktailed Japanese Bantams. They are good layers and make a handsome picture on your lawn. This breed was introduced into the United States sometime in Sicily. He wanted some fowls for use on his return voyage to America, but it he resolved to bring them home. On arrival at Baltimore the fowls were taken claim to superior egg production. They are non-setters and the pullets commence after they get their feathers. Birds from our best pens won First, Second and Third on Cockerels at the New England Fair held in Worcester, 1914.

Buttercups. If you want a standard breed for business, take the White Wyandotte

will be an ornament to any yard or lawn, try the Blacktailed Japanese Bantams. They are good layers and make a handsome picture on your lawn.

PRICE OF BABY CHICKS.

	March Delivery.	April Delivery.
Rhode Island Reds.....	Each \$.20	Per 100 \$15.00
White Plymouth Rocks.....	" .20	" " 15.00

Steel Garages

This Steel Garage is in a class by itself, and should not be compared with the cheaper garages on the market. It embodies the following features.



Our Steel Garage is made of heavy crimped galvanized steel with heavy galvanized steel side supports, galvanized roof and doors and wire glass windows.

Standard size 10 ft. 6 in. x 18 ft. Has 3 wire glass windows, 24 inches x 26 inches. Two 8 ft. x 4 ft. panelled doors and 1 side door.

Price of standard size, \$185. F. O. B. cars, Nashua, N. H. Can be set up for \$10.00. Anyone can do it.

Prices on other sizes on application. Send for circular.

Pyrene Fire Extinguishers

The fire extinguisher that puts out any kind of fire.

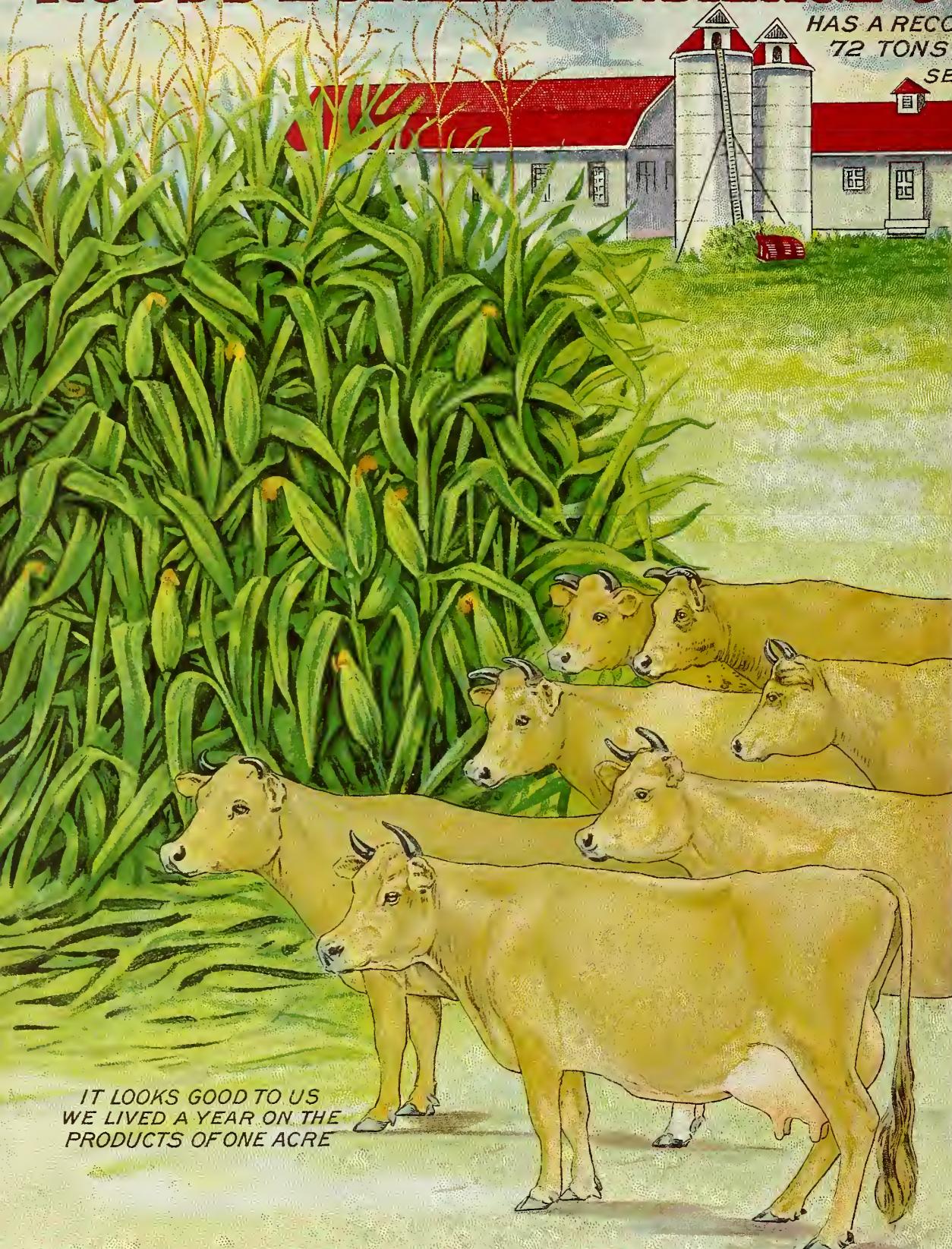


There is no such thing as a fire-proof building. The Albany capitol, which was supposed to be absolutely fire-proof was damaged to the amount of six million dollars. With a Pyrene extinguisher at hand in the first five minutes all this could have been saved. There is nothing to compare with it, for it not only puts out all kinds of fires but puts them out without injury of any kind. It is a combination of powerful gases in chemical form, absolutely void of moisture, rendering it an absolute non-conductor. It contains neither acid nor alkali and will not freeze at 60 degrees below zero, nor can it evaporate. Solid brass extinguisher filled ready for use, \$7.00. Nickel-plated, \$8.00. Weight 7 lbs. Extra liquid, per quart, \$1.00. Weight 4 lbs. Jolt-proof brackets for carriages and automobiles, 50 cts. Weight 1 lb. You will save the price in insurance on your automobile if you carry one of these extinguishers.

Owing to the unsettled conditions of the market, due to the war, all prices quoted in this catalogue are subject to change without notice.

ROSS'S EUREKA ENSILAGE CORN

HAS A RECORD OF
72 TONS PER ACRE
SEE PAGE 12-13



IT LOOKS GOOD TO US
WE LIVED A YEAR ON THE
PRODUCTS OF ONE ACRE

ROSS BROS. CO., WORCESTER, MASS.

EVERYTHING FOR THE FARM BUT MORE ESPECIALLY FARM SEEDS